Sydney WATER

23 June 2025

Andrew Nicholls PSM
Chief Executive Officer
Independent Pricing and Regulatory Tribunal
Via email: [redacted]

IPART Draft Determination - Review of prices for Sydney Water Corporation from 1 October 2025

Dear Andrew,

I am writing to outline our organisation's response to the Draft Determination on Sydney Water prices 2025–30 and to address key issues raised in the context of our regulatory submission.

Our initial submission was based on two years' of engagement with customers and delivers the government's housing and economic growth priorities. We recognise our responsibility to balance these essential investments with the realities of customer affordability amid cost-of-living pressures. This principle shaped the Price Proposal and continues to guide our response.

Our updated proposal has been carefully developed to balance costs and risk, prioritising the essential services our customers value most. This approach reflects a decision to accept a higher level of risk so we can reduce costs to customers.

Our response outlines our positions on the 37 draft decisions and the questions posed in the Draft Determination. We have specifically highlighted six priority issues for further consideration, where we believe that the risk outweighs the incremental cost to customers and therefore is not in their long-term interest. In support of this, we have provided additional evidence and information in the attachments.

Our aim in this response is to be constructive and transparent by clearly highlighting the need for targeted investments but remain open to alternative pathways that can balance achievement of the outcomes sought from all stakeholders.

We look forward to continuing to work with you to achieve outcomes that benefit all who live, work and play in Greater Sydney and the Illawarra.

Yours sincerely,

[redacted]

Securing Sydney's water future

Response to IPART's Draft Determination on Sydney Water prices 2025–30

sydneywater.com.au

Sydney WATER

Acknowledgement of Country

Sydney Water respectfully acknowledges the Traditional Custodians of the land and waters on which we work, live and learn. We pay respect to Elders past and present.

A message from the Chair and A/Chief Executive Officer

We appreciate the opportunity to respond to IPART's Draft Determination on Sydney Water prices for 2025–30 and wish to acknowledge the thorough work IPART has undertaken to review our submission.

We are encouraged that IPART has recognised the scale of investment needed to maintain and improve our services, and that our capital expenditure in the previous regulatory period has been assessed as prudent and efficient. IPART's recognition of the depth and rigour behind our planning is valued, as is the identification of areas warranting further evidence and conversation – particularly around growth and pre-treatment.

We understand and respect IPART's critical role as the independent regulator, and our response is a constructive contribution to the determination process. We have listened to feedback from customers, stakeholders, government and IPART, and have sought pathways that balance critical customer needs with prudent expenditure.

Sydney Water is a vital enabler of NSW Government policy and direction, with responsibilities that extend far beyond simply providing water and wastewater services. Our infrastructure and operations are foundational to the delivery of government priorities across housing and urban growth, water security and resilience, environmental protection, economic development, and community wellbeing.

IPART's Draft recommends a bill increase of 25.2% rather than the 53.3% proposed by Sydney Water. This is largely through financial changes and changes to bulk water supply costs but also through reductions to our proposed capital investment and operating expenditure.

We are concerned that the reductions in our capital investment and operating expenditure put at serious risk the priorities our customers and stakeholders have voiced so clearly – particularly regarding water quality and housing supply. Our response outlines alternative positions for consideration.

Where the need or timing for investment or expenditure to support customer services is uncertain, we acknowledge IPART's position that customers should not bear that risk. We accept this principle and propose pathways to address uncertainty and provide targeted evidence where we believe immediate action is in the best interests of customers – especially where the consequences of inaction would be an unacceptable risk to public health, the environment, growth, and the economy.

With these points in mind, we have proposed an alternative position, which equates to a 32% increase in a typical bill by the end of the regulatory period. This approach reflects our commitment to balancing customer affordability with the need for essential upgrades to our water services to maintain the service levels our customers expect.

Throughout this process, we have challenged ourselves to take on higher risk to limit impacts to customer bills and made tough choices about where to focus our expenditure to maintain service levels. Our updated proposal further reduces our operating expenditure by $575 million and capital expenditure by $2.1 billion. This means we are taking on significantly more risk than originally proposed which may impact performance.

As an efficient business we will balance our investments and manage risk as if we are in a competitive environment, however if performance deteriorates and if risks to meeting regulatory standards and customer expectations becomes intolerable, we will take prudent action.

Our shared goal is to ensure that Sydney Water continues to deliver safe, reliable, and sustainable services, in a way that best serves our customers and the broader community. The updated proposal reflects these priorities: doing important work now to avoid bigger problems later. Our commitment remains keeping Sydney's water clean and secure, so our city can continue to grow and thrive.

Yours sincerely,

Our response to IPART's Draft Determination

Over the past two years, customers have told Sydney Water what they want through the Our Water, Our Voice engagement program and this has underpinned a Long Term Capital and Operational Plan which captures key infrastructure and operational decisions to 2050.

In April 2023, IPART released its new Water Regulation Handbook – with the final version released in July – putting a strong focus on customers, costs, and credibility (the 3Cs framework). We also recognise the Premier's letter to IPART last August, highlighting the cost-of-living pressures facing our communities.

In September 2024, we submitted the Price Proposal for 2025–30. This comprehensive document – 546 pages including 12 appendices – was built on the 3Cs framework. It proposed a $16.6 billion investment in infrastructure and $9.9 billion in operating expenditure to deliver safe, reliable water, wastewater, and stormwater services for Greater Sydney and the Illawarra.

Since then, we've responded to 284 requests for information and participated in just under 50 separate interviews with the independent efficiency reviewers, AtkinsRéalis. Detailed evidence – financial models, project plans, benchmarking data, and more – was provided to demonstrate that the proposal is both prudent and efficient.

With IPART's Draft Determination now released, many of the recommendations, particularly those relating to capital expenditure, rely heavily on the "Lower Bound" findings from the AtkinsRéalis review. There is concern that several conclusions by AtkinsRéalis are based on incorrect assumptions about risk and the impact on reliability, and do not fully reflect the detailed information supplied during the review process.

The proposal was designed to strike a balance between keeping costs as low as possible and effectively managing risks. In response to cost of living pressures, the updated proposal accepts a higher level of risk to further reduce costs for customers, while maintaining a focus on delivering the essential services that communities rely on.

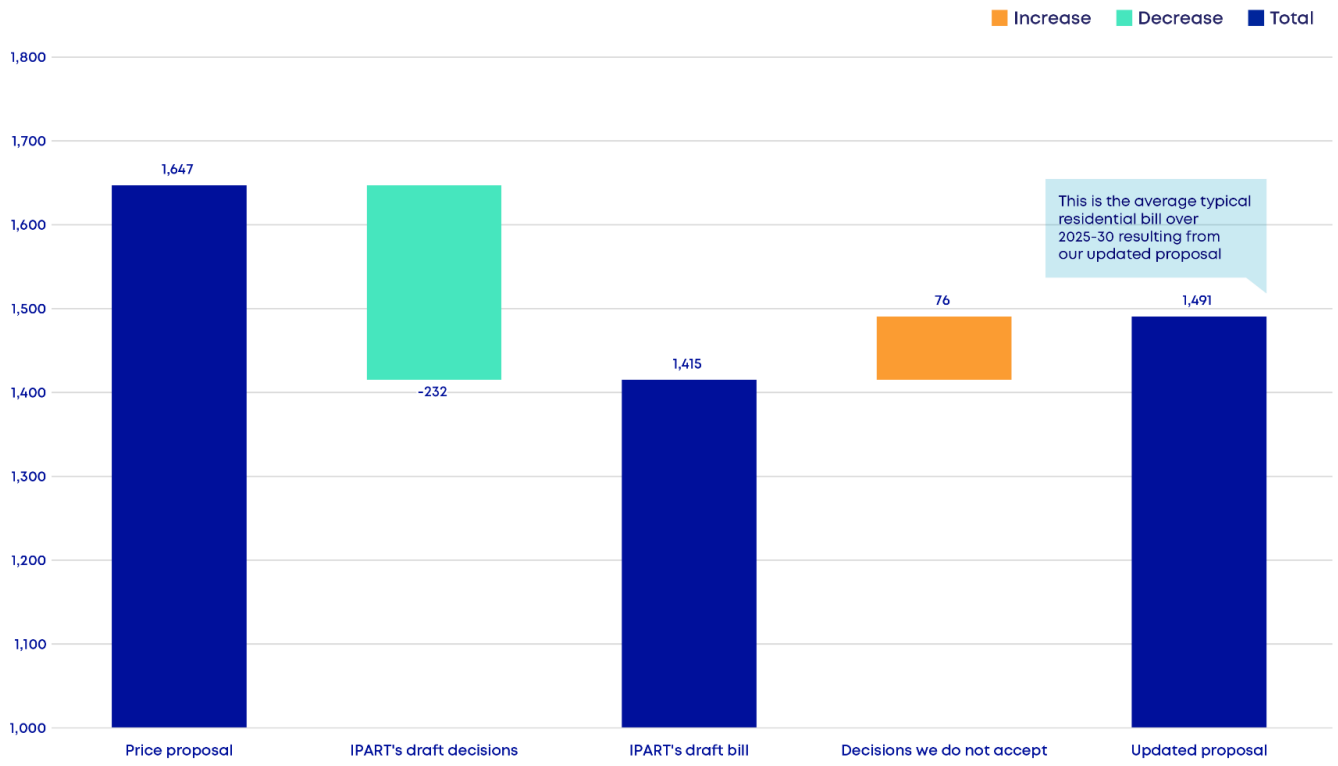
Comparing bills at the start of the period against bills in 2030, the Price Proposal represented a 53.3% increase, while IPART's draft decisions would result in an increase of 25.2%, excluding inflation. As shown in Figure 1, IPART's draft decisions result in an average annual customer bill of $1,415 over the 2025–30 period – $232 a year or 14% lower than the $1,647 average annual customer bill in the Price Proposal. Approximately half of the difference between the two figures is due to IPART's decisions on the Weighted Average Cost of Capital (WACC), bulk water charges, and the tax allowance – factors outside of Sydney Water's control. The remaining half is attributed to IPART's reductions to our proposed capital expenditure and core operating expenditure.

The updated proposal addresses all 37 recommendations and responds to the specific questions raised in IPART's Draft Determination. While most of IPART's draft decisions are accepted, there are strong reservations about the proposed decisions on operating expenditure and capital investment. The updated proposal demonstrates that, for a further increase of $76 (or 5%), more resilient and reliable service outcomes – better aligned to our customers' expectations and regulatory requirements – can be achieved. This updated and amended approach frames the response and reflects a commitment to balancing customer affordability with the need for essential upgrades to water services.

Comparing typical household bills – our updated proposal versus IPART's draft decisions

Our updated proposal sets out clear evidence supporting alternative positions that would result in an increase of $76 to the average typical residential bill as proposed in the Draft Determination. Under the updated proposal, the average annual bill for a typical customer would be $1,491 per year.

Figure 1: Typical household bills over 2025-26 to 2029-30, $2024-25
Our updated proposal versus IPART draft decisions



Sydney Water's position on IPART's draft decisions and questions

Sydney Water accepts 29 of IPART's 37 draft decisions and has provided comments on the remaining items. Further detail and reasoning are provided in this document and its attachments.

✓ **Accepts**: Sydney Water is not challenging or contesting IPART's draft decision. Includes issues that we are neutral towards, willing to accept the increased risk associated with, or consider more appropriately addressed in future price reviews.

× **Does not accept**: Sydney Water has strong reservations with IPART's draft decision, and believe it poses an unacceptable risk for customers and stakeholders.

Table 1: Sydney Water's positions on IPART's 37 draft decisions

ID	IPART Decision	Sydney Water Position
1	To grade Sydney Water's pricing proposal as Standard.	✓
2	To set Sydney Water's total operating expenditure allowance for the 2025 'determination period at $8.92 billion as shown in Table 4.2	×
3	To set the bulk water volumes 0.8% lower than Sydney Water proposed, as set out in Table 4.6.	✓
4	To set bulk water costs at $2.4 billion over the next 5 years, as set out in Table 4.7	✓
5	To set the efficient capital expenditure of $9.7 billion over 2019–20 to 2024–25, as shown in Table 5.1	✓
6	To include $10.7 billion of capital expenditure into Sydney Water's notional revenue requirement for the 2025 determination period, as shown in Table 5.2	×
7	To set Sydney Water's notional revenue requirement at $17.6 billion over the 2025 determination period.	×
8	To exclude from the RAB, Sydney Water's proposed adjustment of: – $485 million for historical Rouse Hill developer charges between 2000 and 2009 – $140 million for historical Blue Mountains Tunnel finance lease payments between 1990 and 2016.	✓
9	To set an allowance of $5.0 billion for the return on assets component of the notional revenue requirement, noting that: a. the opening RAB on 1 July 2025 is $28.9 billion b. we added $4.6 billion in capital costs, .net of disposals and depreciation c. we used a real post tax WACC of 3.2% as the efficient rate of return.	✓
10	To set the return of assets (regulatory depreciation) at $3,022.9 million.	✓
11	To set the return on working capital as $83.3 million over the 2025 determination period.	✓
12	To set the tax allowance as $0 over the 2025 determination period.	×
13	To make the following revenue adjustments to Sydney Water's notional revenue requirement over the 2025 determination period: a. $316.7 million for the Demand Volatility Adjustment Mechanism (DVAM) b. -$69.6 million for the cost of debt true-up c. $333.9 million for the deferral year true-up	✓
14	To accept Sydney Water's proposal to continue with the price cap approach to regulation.	✓
15	To accept Sydney Water's proposal to continue to have a cost pass-through mechanism to its customers for costs associated with the Shoalhaven Transfer Scheme.	✓
16	To not accept Sydney Water's proposal to maintain the SDP cost pass-through mechanism.	×

ID	IPART Decision	Sydney Water Position
17	To not accept Sydney Water's proposal for the SDP Expansion true-up mechanism for actual costs incurred.	✓
18	To consider at the next determination of Sydney Water's prices a true-up of revenue over the 2025 determination period due to changes in bulk water prices resulting from future bulk water price determinations.	✓
19	To accept Sydney Water's water demand forecast over the determination period, adjusted for the price elasticity of demand.	✓
20	To maintain Sydney Water's ±5% demand volatility adjustment mechanism (DVAM) materiality threshold.	✓
21	To accept Sydney Water's proposed price structures including: a. setting the variable water usage charge based on long-run marginal cost of water supply b. maintaining the wastewater usage charge based on deemed usage, updated for inflation c. setting fixed service charges to recover remaining efficient cost.	✓
22	To increase the variable water usage charge over the 2025 determination period from $3.10/kL to $3.50/kL to better reflect the long-run marginal cost and customer preferences for more of the costs to be put on the variable usage charge.	✓
23	To set stormwater charges so they reflect full-service costs, including residual scheme costs over time.	✓
24	To spread income taxes on developer contributions for stormwater services across wastewater customers to minimise any distortionary impacts they may have on stormwater prices.	✓
25	To cease all remaining Rouse Hill Land Charge payments from the commencement of the new determination period.	×
26	To set Sydney Water's maximum variable water usage charges to $3.10/kL in 2025–26, rising to $3.50/kL in 2029–30, as shown in Table 9.1.	✓
27	To set Sydney Water's drought uplift water usage price and unfiltered water price as shown in Table 9.2.	×
28	To set Sydney Water's maximum fixed water service charges as shown in Table 9.3 for residential customers and Table 9.4 for non-residential customers.	✓
29	To set Sydney Water's maximum deemed wastewater usage charge at $1.41/kL, as shown in Table 9.5.	✓
30	To set Sydney Water's maximum fixed wastewater service charges as shown in Table 9.6 for residential customers and Table 9.7 for non-residential customers.	✓
31	To set Sydney Water's maximum stormwater charges as shown in Table 9.8 for residential customers and Table 9.9 for non-residential customers.	✓
32	To continue to defer setting prices for Sydney Water's recycled water schemes.	✓
33	To set Sydney Water's maximum prices for late or declined payments as shown in Table 9.10	✓
34	To set Sydney Water's trade waste charges and miscellaneous and ancillary charges as shown in Appendix D.2 and D.3, Tables D.12 to D.16.	✓
35	To accept Sydney Water's proposed performance measures and targets, with some modifications to metrics as discussed in Section 11.1.2.	✓
36	To apply the following incentive schemes to Sydney Water: a. the CESS and EBSS with no carve-outs b. the leakage ODI as per Sydney Water's proposal with its updated data.	×
37	To apply a 1% cap on the revenue adjustment across the ODI, EBSS and CESS over the 2025 price period.	✓

In Section 1.9 ‘Tell us what you think’ of the Draft Determination, IPART requested feedback on its report recommendations. The table below sets out where in our response documents we have addressed each of these questions.

Table 2: Sydney Water’s response to IPART’s eight questions

Ref#	IPART Question and recommendations	Sydney Water response, refer to:
1.	Our draft expenditure decision excludes most of the Pretreatment Program costs ($957 million or 75% of the program costs) in the capital allowance, as the case for the program in this determination period is not strongly justified. Are you comfortable with this trade-off of costs and benefits? Or would you prefer to pay higher water prices to ensure higher water quality in exceptional or unusual events?	This document: Priority 2 – Pretreatment Attachment 2 - Infrastructure Capital Expenditure, Section 2.4
2.	What are the respective benefits and risks associated with the proposed Pretreatment Program?	This document: Priority 2 – Pretreatment Attachment 2 - Infrastructure Capital Expenditure, Section 2.4
3.	The current SDP cost pass-through mechanism insulates Sydney Water from the cost or revenue impacts of sourcing water from SDP. This reduces Sydney Water’s incentive to use the lowest-cost source of water. Would you prefer a mechanism which ensures that Sydney Water has an incentive to choose the lowest-cost source of water, regardless of the source?	This document: Regulatory mechanisms Attachment 6: Addressing the changing revenue needs of Sydney Water, Sections 6.1 Bulk water prices, and 6.2 Bulk water volumes
4.	Should we pass changes in bulk water prices through retail water prices when changes in bulk water prices occur during the determination period, or wait until the end of the period?	This document: Priority 5 - Growth and maintenance opex Attachment 6: Addressing the changing revenue needs of Sydney Water, Section 6.1 Bulk water prices
5.	If Sydney Water extends its wastewater services to Hawksbury City Council area in the future, should those customers pay separate wastewater price, or should additional costs be shared across all customers? Beside bill impacts, what other factors should be considered?	Attachment 7 – Hawkesbury City Council Wastewater Assets
6.	Are there any unintended consequences of recovering income tax on developer contributions costs from wastewater customers that we should consider?	Attachment 3: Revenue requirement, Section 3.2 Revisions to NRR assumptions
7.	What are your views on the affordability of our draft maximum water, wastewater and stormwater prices?	Affordability is addressed throughout this document and in the attachments. Prices are discussed in Attachment 4: Prices and Bill Impacts
8.	What are your views on our proposed performance metrics? Could these be improved?	This document: Performance Attachment 5: Performance and Accountability

Contents

Securing Greater Sydney's water future

Every time customers turn on the tap or flush the toilet, they rely on a complex water and wastewater system that Sydney Water keeps running smoothly. In the past, big investments gave customers a strong, reliable network with room to accommodate growth. More recently, the focus has moved to connecting new areas and making the system resilient.

Since 2020 – the last price determination – the operating environment has changed: we have tighter regulations, rising costs, more frequent impacts from extreme weather, and a continually ageing network, most of which is hidden underground. As the city keeps growing and the system gets bigger, it's becoming more challenging to keep everything running as required. These pressures mean more investment is needed to keep services reliable and safe – exactly what our customers have asked us to prioritise.

Every part of the system is interconnected, so even small changes can ripple across the network – ultimately shaping the customer experience. This applies equally to both water and wastewater systems, which is why a whole-of-system approach is critical when making decisions.

The updated proposal strikes the right balance between essential investment and the need to keep bills affordable. This ensures customers continue to receive the reliable service and value they expect – even during challenging times.

The cost of delay: why timely investment matters

However, the timing of investment is critical to achieving true efficiency. When investment is delayed, we are forced into a reactive position: 'taking a risk' that an asset won't fail or that growth won't materialise as quickly, hoping to avoid immediate expenditure. But inevitably, when that risk does eventuate – when an asset fails or growth outpaces infrastructure – the response must be rapid and often interim. This can mean fixing the same problem twice: first with a temporary solution to stem the immediate impact, and later with a more permanent fix. This reactive approach not only increases costs but also diverts resources from other planned activities, raising the risk of further failures elsewhere.

This cycle of reaction and interim fixes is inherently inefficient. As noted in the Water Services Association of Australia's submission to IPART, there are also considerable risks (p8): *"The lesson for Australia from the UK is that kicking the investment can down the road is a failed strategy. It will lead to a decline in service levels and to an even greater level of investment and pricing increases to fix broken systems."* In contrast, prudent, well-timed investment is the most effective way to maintain affordability and reliability.

Our updated proposal is based upon prudent, timely investment, delivering long-term cost stability and reliable customer service, while seeking to limit increases to bills 2025–30, but also avoid stepped bill increases in 2030. It aligns with the NSW Government's policy objectives and ensures customers only pay for efficient, necessary investments – not for the higher costs that come from reacting to risks outside their control or preferences. Delayed or insufficient investment puts customer and stakeholder priorities – and the benefits they bring – at risk.

A customer-centric approach

This response, like the Price Proposal, is firmly grounded in a customer-centric approach. Over two years, we engaged with more than 13,000 customers and stakeholders through Our Water, Our Voice – the most extensive consultation in our history. This program utilised robust research methods such as large-scale surveys, representative sampling, and in-depth community workshops and ensured that the insights gathered reflect the diversity and priorities of customers. IPART highlighted this program as a genuine and comprehensive effort that reflects demonstrable progress in how we incorporate customer insights into decision-making.

A key element of the engagement process was the involvement of the Customer and Community Reference Group (CCRG), which represents a broad cross-section of customer groups. Their insights played a significant role in shaping both the Price Proposal and this response. The CCRG's feedback reflected the diverse needs and expectations of the communities they represent, and their ongoing involvement continues to inform decisions to ensure alignment with customer priorities.

Customers identified their top priorities as maintaining safe and clean drinking water, keeping bills affordable, and ensuring waterways and the environment are free from pollution. Their feedback reflected satisfaction with current service levels and a strong preference for proactive, stable service delivery. In response, we restructured our business and realigned performance metrics to these priorities, embedding customer outcomes at the core of long-term plans.

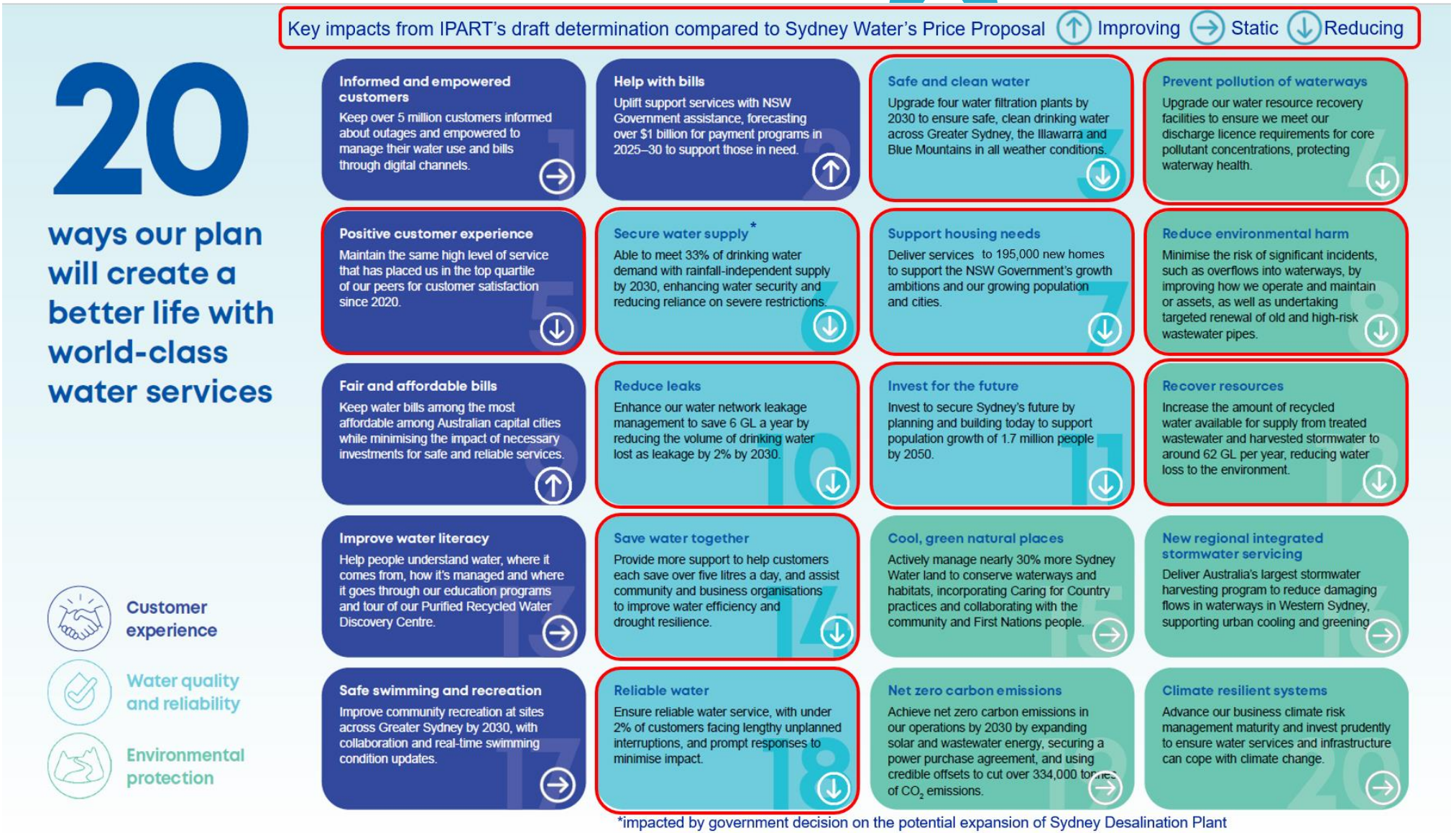
IPART's Issues Paper received 477 submissions, highlighting concerns about affordability and price increases, alongside support for essential investments. By balancing this targeted public feedback with the comprehensive, evidence-based insights from Our Water, Our Voice, final decisions can be grounded in the needs and expectations of all customers and stakeholders – ensuring fair and sustainable bills.

IPART's Draft Determination indicates that Sydney Water's typical household bill would remain close to the national average when compared with similar utilities across Australia. Even with the increase outlined in our updated proposal, bills will stay within the mid-range – and within a few years, could become among the lowest in the country as more utilities submit formal price proposals seeking higher levels of investment. This trend reflects what is being referred to as the "water wave", as noted in Infrastructure Partnerships Australia's submission to the Issues Paper. As this wave builds, water bills nationwide are expected to rise in response to the growing need for capital upgrades and system resilience.

We recognise that IPART's draft decisions are designed to address short-term cost-of-living pressures. At the same time, we are mindful that these decisions may introduce financial and service risks that could affect the reliability and resilience of our services in the long- and short term and may also impact generational equity considerations. We believe it is important to consider these potential impacts as part of a balanced approach to service delivery.

Based on established customer outcomes, Figure 2 and the following tables provide an initial view of Draft Determination decisions, indicative performance trends, and their potential impact on the '20 ways our plan will create a better life with world-class water services'.

Figure 2: Material impacts from the Draft Determination decision on customer outcomes



Customer experience: Deliver a great customer experience

Price Proposal objectives and measures	*IPART Draft Determination impact to what we will do by 2030 **	*IPART Draft Determination impact to Price Proposal customer measures*
Objective 1: Fair and affordable bills We provide value for money, keep bills affordable and support those in need **Affordability** target ≤1.24% by 2030	Changes in pricing including: • Bill impact reduced through lower increase and changes to bill smoothing • Reduction in opex funding for retail services to cater for growth in customers (-80%)	Improving performance trend (target achieved). Customers experience: • Reduced overall bill impact in short term • Less customers are likely to enter hardship due to lower impact on overall bills • Bills likely to materially increase next price path due to true ups of actual expenditure deferred from the coming regulatory period.
Objective 2: Positive customer experience We are inclusive and helpful, treating all customers fairly and with respect **Customer satisfaction** target top quartile	Reduction of about $160m capex investment: • Stormwater renewals deferred (-49%) • Overall reductions in water quality and reliability and environmental protection outcomes. Reduction of about $16m opex: • Reduced funding for retail services impacting customer experience (refer objective 1) • Stormwater remediation and desilting works (-75%)	Reducing performance trend (target at risk). Customers experience: • Declining service level performance, leading to increased incidents, poor media coverage and higher rates of disruption to customers • More frequent flooding and stormwater litter impacting waterways, parks and properties
Objective 3: Informed and empowered customers We keep customers informed and include communities in the decision-making process **Water literacy** target ≥ 5.75 out of 10 by 2030	Reduction of about $218m capex investment: • Reduction in roll out of digital meters (-74%), also creating challenges to saving water together objective Reduction of about $33m opex: • Reduction in telecommunications costs to support roll out of digital meters (-100%)	Static performance trend (improvement at risk). Customers experience: • Digital water meters remain unavailable to most customers to help manage water use
Objective 4: Safe swimming and recreation We support improved community access to lands and waters for safe swimming and recreation **Public access and recreation** target ≥ 1 extra site per year	Reduced wastewater and stormwater performance compromising waterway quality (refer environmental protection outcome)	Static performance trend (improvement at risk). Customers experience: • Fewer community recreation sites able to be brought online

* Even one of the specific reductions identified by IPART can trigger widespread impacts, as each part of the system is interconnected. Multiple cuts will compound these effects, leading to ongoing service issues and higher long-term costs for customers due to spending beyond allocated funding. Portfolio adjustments not included.

Water quality and reliability: Provide safe, clean, reliable drinking water every day

Price Proposal objectives and measures	*IPART Draft Determination impact to what we will do by 2030 **	*IPART Draft Determination impact to Price Proposal customer measures*
Objective 1: Safe and clean water Our water is kept safe and clean to drink **Drinking water quality** target = 100% each year (measure to be amended)	Reduction of about $1,253m capex investment: • Water filtration plant pre-treatment upgrades deferred at Cascade, Orchard Hills and other sites (-85%) • Majority of WFP renewals deferred (-74%), as well as reservoirs (see reliable water) and water treatment infrastructure inadequate to service growth (-23%) Reduction of about $69m opex: • Step change in WFP maintenance reduced (-50%) • Step change in pre-treatment (-100%) • Limited provision to respond to new water quality regulation	Reducing performance trend (meeting target is at risk). Customers experience: • Reduced ability to access safe and clean drinking water during adverse water quality events • Increased conserve water notices leading to risk of boiled water alerts • Reduced water availability to service growth due to constraints in treating poor raw water quality
Objective 2: Secure water supply We build water supply resilience to climate and growth **Available water supply** target ≥ 33% RFIS by 2030 (to be amended to align with government decisions on SDP expansion)	Reduction of about $1,405m capex investment: • Rainfall independent supply (RFIS) planning delayed (-10%) and network ability to accept water from new RFIS (-100%) due to government decision to defer Sydney Desalination Plant expansion • Water network infrastructure inadequate to service growth of new homes and business (-23%) Reduction of $516m in bulk water costs reflecting IPART's draft decision on Water NSW prices	Reducing performance trend (target will not be achieved and will be amended due to deferral of RFIS). Customers experience: • Delays in up to 75,000 new homes due to water infrastructure limitations • Ongoing risk of longer and more severe water restrictions during drought • Not meeting customer expectations for new water supplies • Potential widespread supply disruptions due to limited system resilience and reliance on single points
Objective 3: Saving water together Our water is used more efficiently, and we support the community to save water **System leakage** target ≤ 7% by 2030 **Drinking water use (residential)** target < 182 LPD by 2030	Reduction of about $24m opex: • Reduced funding for water network maintenance and deferred asset renewals leads to increased reliance on reactive repairs, resulting in slower response times to leaks and pipe breaks (-100% of step) • Reduction in water conservation program (-$5m), potentially moderated by higher water usage price signal • No provision for climate change fund contributions	Reducing performance trend (meeting leakage target at risk). Customers experience: • Increased response times in addition to aging network leading to progressive increase in leakage • Risks to water supply security may occur sooner • Greater customer incentive to save from increased water usage price
Objective 4: Reliable water Our water services are reliable every day **Water continuity** target < 2% each year	Reduction of about $126m capex investment: • Water reservoir renewals deferred (-41%), impacting other objectives including safe and clean water Reduction of about $25m opex: • Step change for maintenance across water networks and plants, including reservoirs, facilities and corrective maintenance (-55%)	Reducing performance trend (meeting target is at risk). Customers experience: • Increased water supply interruptions and slower response to outages • Chance of a large break or leak causing significant disruption and damage • Higher frequency of system failures compared to current levels may bring forward unplanned repairs or replacements, increasing risks and costs

* Even one of the specific reductions identified by IPART can trigger widespread impacts, as each part of the system is interconnected. Multiple cuts will compound these effects, leading to ongoing service issues and higher long-term costs for customers due to spending beyond allocated funding. Portfolio adjustments not included.

Environmental protection: Ensure we protect our waterways and environment now and for the future

Price Proposal objectives and measures	*IPART Draft Determination impact to what we will do by 2030 **	*IPART Draft Determination impact to Price Proposal customer measures*
Objective 1: Prevent pollution We prevent pollution of waterways and the environment by improving our wastewater and stormwater systems. We support our community to control pollution at source **Quality of treated wastewater** target = 100% by 2030 (measure to be amended) **Pollution and environmental harm incidents** target ≤ 1053	Reduction of about $2,520m capex investment: • Water resource recovery facility renewals deferred (-30%), including upgrades needed to improve the Hawkesbury–Nepean River • Critical sewers renewals reduced (-64%) and wastewater pumping stations (-56%) • Wastewater infrastructure (-23%) inadequate to service growth • Wet weather overflows reduction scaled back (-10%) Reduction of about $98m opex: • Lower than proposed step change for wastewater treatment and network maintenance, across water resource recovery facilities, network desilting and facilities (-50%) • Offset activities reduced (-55%) and limited provision to respond to new regulation	Reducing performance trend (EPL limits will not be achieved, increased risk of pollution incidents not meeting target). Customers experience: • Delays in up to 75,000 new homes due to wastewater infrastructure limitations • More pollution events in wet weather affecting waterways, beaches and parks, threatening biodiversity and public health • Increased pollution of the Hawkesbury-Nepean River • Potential closures of beaches due to high contamination levels • Higher risk of uncontrolled wastewater overflows in dry weather impacting waterways and recreation areas and service disruptions • Impact of additional costs of fines, prosecutions and clean ups
Objective 2: Recover resources We maximise recycling and reuse of water, energy and materials. We minimise and manage our waste **Volume of recycled water available** target ≥ 62 GL/yr by 2030	• Recycled water schemes delivered slower than planned and WRRF capacity and reliability issues (refer prevent pollution objective) • Limited provision to invest to meet new biosolids contaminant levels and ensure safe resource recovers	Reducing performance trend (target at risk). Customers experience: • Reduced recycled water available for customers desired uses, decreased recovery of beneficial resources
Objective 3: Cool, green and natural places We contribute to community wellbeing through providing recycled water to green and cool public spaces. We care for Country, and conserve and restore waterways and natural habitats **Natural area and green infrastructure land actively managed** target ≥ 78% by 2030	Reduction of about $160m capex investment: • Slower than planned delivery of Western Sydney integrated stormwater harvesting and recycled water scheme (as adjusted from $581m, refer attachment 2) Stormwater naturalisation and renewals of existing waterway health assets deferred and maintenance at risk from lower than proposed operational stormwater (refer customer experience outcome) and lower than proposed property maintenance budgets	Static performance trend (improvement at risk). Customers experience: • Lower conservation outcomes for waterways and habitats, and more litter and sediment pollution • Fewer concrete channels naturalised • Less recycled water available for urban cooling and greening • Extreme heat in Western Sydney not mitigated by green spaces and stormwater irrigation
Objective 4: Net zero carbon emissions We achieve net zero carbon emissions in our operations from 2030 in response to the increasing impact and risk of the changing climate **Net carbon emissions (tCO_2-e)** target = Achieve net zero carbon emissions by 2030	• Emissions reduction and renewable energy projects at risk due to lower than proposed operational and maintenance budgets	Static performance (improvement at risk). Customers experience: • Purchase renewable energy and carbon offsets needed to achieve net zero emissions
Objective 5: Climate resilient systems Our water services and infrastructure (drinking water, wastewater, recycled water and stormwater) can cope with climate change **Climate risk maturity health check** target = Achieve advanced by 2030	• Limited funding or focus available for climate risk program • Shorter term risks prioritised and average weather conditions assumed in infrastructure planning	Static performance. Customers experience: • Service resilience is likely to deteriorate, with growing susceptibility to system disruption and failures.

* Even one of the specific reductions identified by IPART can trigger widespread impacts, as each part of the system is interconnected. Multiple cuts will compound these effects, leading to ongoing service issues and higher long-term costs for customers due to spending beyond allocated funding. Portfolio adjustments not included.

Risk to delivery of government policies and regulatory obligations

The programs at risk under IPART's Draft Determination are essential for keeping water services safe, reliable, and in line with the standards customers expect. These programs also support important government policies for Sydney's growth and sustainability, and have been formally endorsed through state plans, ministerial directions, and interagency commitments.

Regulatory obligations are designed to protect the environment and public health, and ensure every customer receives a minimum standard of service. These requirements are set out in the *Sydney Water Act*, Operating Licence, Environmental Protection Licences, and project planning approvals.

We are concerned that the approach in the Draft Determination may unintentionally increase the risk of asset failure over time by prioritising short-term savings over long-term reliability, resulting in more frequent and highly disruptive outages and a decline in customer service.

Table 3: Impact of reductions on delivery of government priorities and regulatory obligations

NSW Government Priority / Regulatory Obligation	Relevant Sydney Water Program	Risk of draft decisions to government programs	Regulatory / Licence Impact
National Housing Accord & NSW TOD Program	Growth servicing, critical sewer renewals	Delays in connecting up to 75,000 new homes; precincts left unserviced; misalignment with housing targets	Increased material harm incidents due to ageing infrastructure; breach of Operating Licence and EPL
Australian Drinking Water Guidelines	Pre-treatment program, Water filtration plant renewals, reservoir renewals	Breach of water quality standards; public health risk; reputational and economic damage	Licence breach due to non-compliance with ADWG; inability to maintain critical infrastructure
Public Health – Drinking Water Compliance	Reservoir renewals and maintenance	Seriously compromised systems (e.g., inaccessible roofs, load-restricted assets)	Potential breach of public health standards and Operating Licence
Environmental Protection – Material Harm Incidents	Wastewater sewer renewals and maintenance	Increase from 3,793 to ~4,000 dry weather incidents (over the regulatory period), with more reaching waterways in the future	Breach of EPL and environmental legislation; reputational and regulatory enforcement risk
Environmental Protection – Treated Wastewater Compliance	Water Resource Recovery Facility capital works	Continued and worsening exceedances of load limits	Ongoing non-compliance with EPL; failure to meet commitments under "return to green" program
Greater Sydney Water Strategy – Objective 2: Resilience	Pre-treatment,	Emergency restrictions or boil-water events for >4 million people; failure to secure future drought resilience	Public health risks; potential breach of Australian Drinking Water Guidelines and Operating Licence
Greater Sydney Water Strategy – Action 2.1: Demand Management & Water Efficiency	Climate Change Fund contributions	Failure to deliver mandated water conservation targets; non-compliance with Ministerial Direction	Licence non-compliance; missed demand management KPIs; reputational risk
NSW State Infrastructure Strategy 2022–2042	Capital delivery program continuity	Cancellation of shovel-ready projects; cost escalation; lost economic uplift; damaged market confidence	Reduced capacity to service growth and meet licence obligations due to halted infrastructure investment
Customer Experience – Water Continuity Standards (<2% interruptions)	Corrective maintenance program	>45,000 properties affected in the long term; fail licence standard	Breach of licence performance threshold; reputational and customer trust risk

Our response seeks to move beyond a heavy reliance on short-term fixes and adopt a forward-looking, integrated approach to managing Sydney's critical water infrastructure. Through effective asset management processes, cost, risk, and performance are balanced to maintain reliable, sustainable services, support government policy and ensure compliance with regulatory obligations.

Understanding the emerging regulatory challenges

Since lodging the Price Proposal in September 2024, several developments have occurred that materially increase risk, service complexity and regulatory cost. These changes were either uncertain or unconfirmed at the time and were therefore not provisioned in expenditure forecasts. Table 4 outlines key events and emerging regulatory obligations that are likely to require consideration in the 2025-30 period.

Table 4: New or emerging regulatory challenges since the Price Proposal

Change or Regulatory Development	Date/Status	Implication for Sydney Water
PFAS in Drinking Water – NHMRC Guidelines Finalised	Expected finalisation: Q4 2025 (Draft published May 2025)	Cascade WFP requires additional permanent treatment upgrades to comply with updated health-based values. No provision in the Price Proposal.
PFAS in Biosolids – NSW EPA Regulatory Framework (HEPA-aligned)	Draft published May 2025; final expected late 2025	Biosolids reuse constraints may require increased monitoring, possible additional storage costs as well as capital upgrades to WRRFs much earlier than planned. Likely impact to 2025–30 capex/opex.
Climate Change Fund Contributions – Ministerial Direction	Issued December 2024	$24 million cost from FY25–29 now mandatory. Not provisioned in the Price Proposal. Alignment with GSWS Priority Action 2.1.
Dams Safety NSW Levy	Announced April 2025, effective 1 July 2025	Ongoing compliance cost (~$200k/year indexed). Required under the Dams Safety Act 2015. No provision in the Price Proposal.
Workplace Exposure Standards – SWA Proposed Changes	Draft revised exposure limits released 2024; final expected 2025	Potential capital upgrades for gas detection and containment systems at WFPs and WRRFs to meet reduced SO_2 and chlorine thresholds. No provision in the Price Proposal
Beach Pollution Events – EPA Investigation and Response	Oct 2024 – May 2025	Debris balls incidents triggered additional EPA monitoring and modelling requirements. Potential for new discharge standards or licence conditions. No provision in the Price Proposal
ACCC Review of Australia Post's postage stamp pricing	Final expected mid-2025	ACCC's preliminary view is to allow a 13.3% increase in prices, subject to stakeholder feedback
Software licensing	Ongoing	We have received external advice to expect further cost increases within the next 5 years on software licences such as SAP, IBM, Adobe.

These risks, while emerging after the Price Proposal, are now significantly more certain and, in some cases, already subject to regulation or ministerial direction. They represent either unavoidable costs or changes in

compliance obligations, making it increasingly difficult to manage within the reduced envelope set out in IPART's Draft Determination. These factors reinforce the need for flexibility in the final determination, whether through appropriate regulatory mechanisms or adjustments to our expenditure allowances.

Advancing integrated solutions and healthy waterways across Greater Sydney

IPART's Draft Determination marks a major shift in how some water services are funded and delivered. By placing integrated systems – like recycled water and stormwater management – on equal footing with traditional services, IPART is enabling more cost-effective, innovative solutions that benefit all customers.

Sydney Water's proposal to include three third-pipe recycled water schemes as part of the least-cost approach to servicing growth was accepted. This is a breakthrough: it formally recognises that integrated systems are the most effective way to protect sensitive waterways from the impacts of urban development.

Importantly, IPART also agreed that costs related to income tax on developer contributions and upgrades to stormwater systems that protect waterway health should be shared across all customers – not just those directly connected to stormwater infrastructure. These costs support broader environmental outcomes and reflect community values around waterway health.

Customers have consistently told us they value healthy waterways. This decision by IPART helps us deliver on that priority – at least cost, and with long-term benefits for Greater Sydney.

Reaffirming delivery capability in a dynamic market

The Draft Determination acknowledges Sydney Water's achievements and robust forward planning, recognising our essential role in serving a rapidly expanding city and the significant scale of required investment. IPART affirms that all historical capital expenditure was prudent and efficient, reflecting confidence in governance and operational discipline, and commends progress in procurement and program delivery – especially for major growth and regional projects.

Sydney Water's recent track record demonstrates the ability to deliver major investment programs is not a risk for customers or the community. Despite the challenges of the past regulatory period – including the disruptions caused by COVID-19, record-breaking wet weather, and a volatile infrastructure supply chain – projects have consistently been delivered on time and processes improved. As a result, the scale of the current investment program has grown significantly, earning positive feedback from Infrastructure NSW and other stakeholders.

We welcome the thorough review by AtkinsRéalis and IPART of our capacity to deliver the proposed capital program for the coming years, pleased that both reviews recognised the improvements made and concluded that Sydney Water has the corporate capacity and supply chain strength to deliver an increased rate of investment.

Review of our ability to deliver

"Sydney Water has demonstrated increasing maturity in procurement and program delivery, particularly in relation to major projects (mainly growth related) and regional level delivery strategies. They have provided a reasonable case that their corporate capacity and supply chain will be able to deliver an increased rate of capex spend."

AtkinsRéalis 2025, *IPART Sydney Water expenditure review,* p. 251.

Cross-sector ability to deliver

"It is an opportune time for Sydney Water to expand their capital program, with latent capacity emerging in the civil infrastructure market… As Australia's transport infrastructure wave has crested and projects move through to completion, it was expected by many that a tsunami of energy projects would fill the capacity gap in the market. In practice, the energy sector has been impacted by significant delays, descoping, or deferral of projects. This has created an 'air bubble' of latent capacity in the infrastructure market. Across the major jurisdictions, [this] is most pronounced in NSW."

Infrastructure Partnerships Australia 2024, *Submission to the IPART review of Sydney Water's Price Proposal 2025-30,* p. 3.

Importantly, the market conditions in New South Wales are currently favourable for expanding capital works. With the completion of many large transport projects and delays in the energy sector, there is now additional capacity in the civil infrastructure market. This "air bubble" of available resources means Sydney Water is well positioned to deliver its planned investments efficiently and cost-effectively.

Project delivery rates have already increased, with a strong and committed pipeline of capital works underway. We have worked hard to increase supplier engagement in the major project pipeline and customers will benefit from the increased competition. Decisions that create uncertainty about project funding or delivery could send negative signals to contractors and suppliers, potentially disrupting ongoing work, delaying much-needed infrastructure for Sydney and increasing costs long term.

Recent performance demonstrates that commitments can be met, even in challenging circumstances. With a mature approach to procurement and program management, and under favourable market conditions, the investment program needed for customers and the city's future is well positioned for successful delivery.

Six priority issues

Sydney Water's response – like the Price Proposal – is built on the principle that customers should only pay for efficient, necessary investment aligned with their stated priorities and government objectives. However, the scale and urgency of our challenge means that simply reprioritising within the proposed budget is not sustainable. New/changing regulatory requirements and environmental standards, and the need to serve a rapidly growing population all require additional resources.

The Price Proposal already balanced affordability with necessary upgrades, having committed to finding $593 million in operating expenditure efficiencies and deferring $1.5 billion in capital investment. Further reductions would make it impossible to meet existing commitments and new needs, risking delays to critical infrastructure, increased service failures, and more unplanned outages.

The recommendations we propose are in addition to IPART's draft decisions and address both immediate and long-term needs: asset renewal, water security, and environmental protection. Every dollar spent on one program means less for another, so absorbing extra costs would force cuts elsewhere.

Customer feedback shows a strong preference for proactive investment alongside affordability concerns. Meeting these needs over the next five years will require more than the current Draft Determination allows.

Table 5 outlines in more detail the six issues presented by Sydney Water for further discussion.

Figure 3: Drivers of bill change between the Price Proposal, IPART's Draft Determination, and our updated proposal (average typical residential bill over 2025-26 to 2029-30, $2024-25)

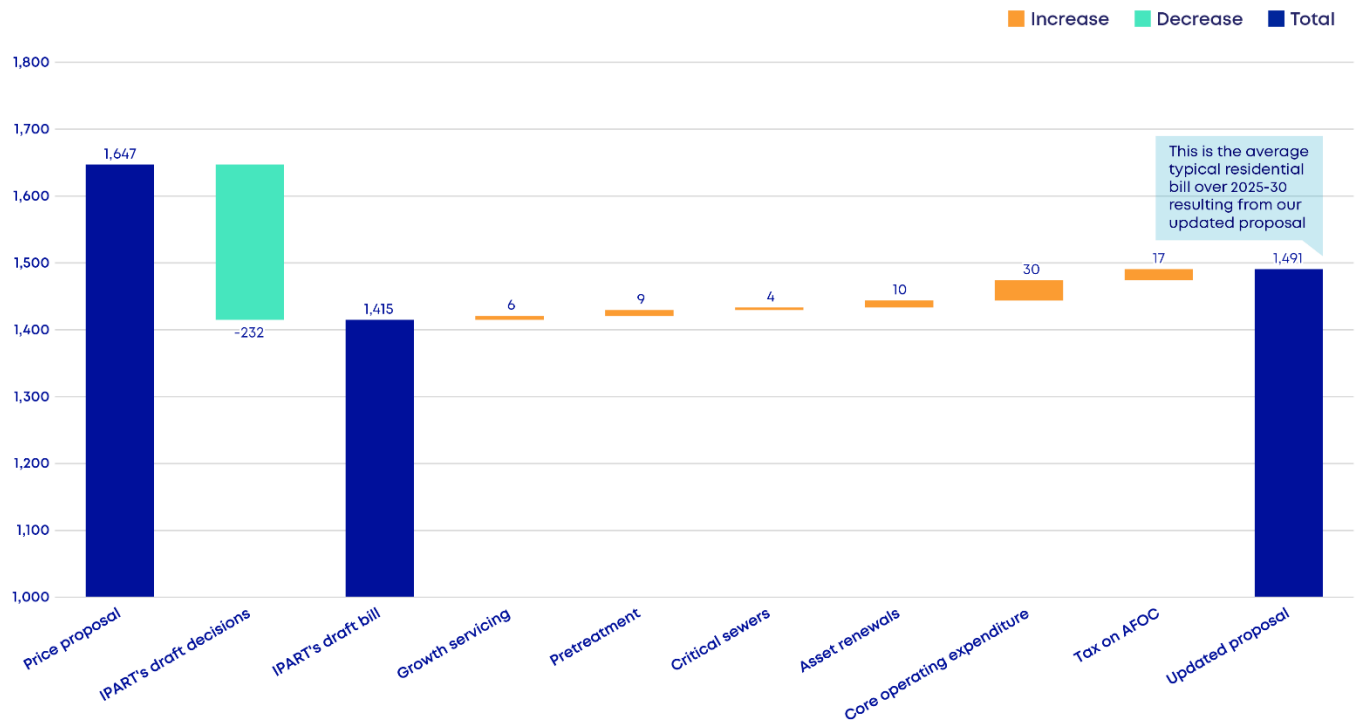


Table 5: Sydney Water's Six Priority Issues

	IPART Draft Determination	Sydney Water updated proposal	Bill impact of updated proposal
Growth servicing	$6.4b	$8.3b	$6 a year
	Ensuring investment supports the infrastructure required for growth, in line with Government policy and direction		
Pretreatment	$170m	$941m (FY25-FY30)	$9 a year
	Risk of emergency water restrictions or boil water alerts to protect public health. Request reinstatement for critical projects.		
Critical sewers	$400m	$870m	$4 a year
	Investing in asset replacements to protect customers and the environment from potential failure of critical sewer lines.		
Renewals	$2.5b	$3.1b	$10 a year
	Compromised reliability, increased occurrence/rate of asset failure, inability to support growth. Request targeted reinstatement based on asset condition evidence.		
Operational expenditure	$8.9b	$9.3b	$30 a year
	Opex allowance does not reflect growth, risking deferred maintenance and higher future costs. Request trend based on connections, not bulk water volumes.		
Tax allowance	$0	$203m	$17 a year
	Risk of over $1.2 billion in unfunded taxable income if ATO rules against IPART's assumption. Request retention of current allowance or true-up mechanism.		

1. Growth servicing: Infrastructure investment aligned with government vision for housing, jobs and businesses

Growth servicing

For an extra 12 cents per week (or $6 per year) per customer, we can deliver the infrastructure needed to support growth and help meet Sydney's housing and job targets

Why this is important

The NSW Government has committed to deliver 377,000 new homes over the next five years as part of the National Housing Accord, about 263,000 of which are additional homes in Greater Sydney. Achieving this depends on the timely delivery of water, wastewater, and stormwater infrastructure, as new homes can't be occupied without these essential services in place.

The optimal strategy for servicing growth depends on the location, size, layout, and staging of many individual development precincts. We do not want our customers to pay more to fund infrastructure that may not be needed in the near term and the Price Proposal maintains a just-in-time approach to servicing growth. We continuously monitor the pipeline of potential development sites and update our plans and forecasts as better information becomes available.

The Price Proposal had already removed around 40% or $5 billion in capital expenditure that was more uncertain as it was to support delivery commencement in the later years. We also took risk on infill outside of growth areas. IPART's Draft Determination removes a further $2 billion from our proposed allowance.

IPART's reductions will impact projects that were to be delivered in this regulatory period and may delay the start of projects to service areas that receive development approval in this period. If development is approved and infrastructure is not available at the time of completion, this can prevent people moving into the homes they have paid for and new businesses from completing the move to new or bigger premises.

Whilst IPART's draft decision to reduce the growth expenditure allowance was presented as a 'top-down' adjustment across the program, we have done an initial assessment of the possible impact across six growth areas considering factors such as the status of delivery and the level of planning already completed. We estimate that IPART's draft decision would only enable the delivery of 120,000 new homes by 2030, which is:

- up to 75,000 fewer homes than the Price Proposal would support,
- 35,000 below the NSW Department of Planning, Housing and Infrastructure's (DPHI) 2023 forecast of 155,000 new homes by 2030, and
- significantly below the number of new homes required to meet the Housing Accord targets.

We also note that in its draft decisions, IPART did not adjust the infrastructure contribution revenue forecast, despite the adoption of a lower underlying growth forecast as implied by the lower capital expenditure

allowance. In its Final Determination IPART will need to ensure that infrastructure contribution revenue forecasts align to expenditure allowances.

Updated proposal

The difference between the Price Proposal and IPART's Draft Determination is largely driven by uncertainty over the outlook for development between now and 2030. IPART considers there is a greater ability to defer investment beyond 2030 by investing 'just-in-time' and that investments already in delivery mean housing targets would still be achievable. AtkinsRéalis recommended to IPART that growth investment should be based on the Sydney Housing Supply Forecast[1], rather than Sydney Water's internal forecast.

Price Proposal	IPART's Draft Determination*	Updated proposal
Deliver new infrastructure to support the construction of around 195,000 new homes as well as non-residential developments that could support about 200,000 jobs[#] over the next 5 years.	Deliver new infrastructure to support the construction of around 120,000 new homes as well as non-residential developments that could support about 165,000 jobs.	Update the growth capital investment allowance to reflect a contemporary forecast of development, such as an updated Sydney Housing Supply Forecast. If an updated forecast is not available, provide a regulatory mechanism to enable the timely delivery of the Price Proposal if actual development demand exceeds IPART's allowance.
$8,326 million	$6,441 million	$6,441 million to $8,326 million

** Attachment 2 contains more information on our concerns with the rationale for IPART's draft decision.*

[#] "jobs" are equivalent jobs of non-residential development (hospitals, schools, industrial, commercial, data centres etc) – based on expected water usage of those developments.

Over the past 12 months, the NSW Government has announced a range of new policies, programs and government bodies with a focus on supporting and fast-tracking housing development in NSW, such as the Transport Oriented Development (TOD) program and the Housing Delivery Authority. We note that these measures:

- are not reflected in the SHSF-2023 forecast;
- provide a strong indication that growth will very likely exceed SHSF-2023; and
- all reduce the risk of growth not eventuating at the scale implied by Sydney Water's forecast, which was cited as one reason why IPART should favour SHSF-2023.

DPHI acknowledges on its website[2] that the next iteration of the SHSF will feature a higher baseline forecast. We anticipate the updated SHSF will result in a forecast that is closer to the internal forecast we

1 Published each year by DPHI, the latest of which is the Sydney Housing Supply Forecast 2023 (SHSF-2023) and published in mid-2024.

2 Sydney housing supply forecast | Planning

used to develop the Price Proposal. We recommend that IPART seek to obtain updated data from DPHI regarding the development of SHSF-2024 and reflect any updates in the final determination.

In our view, the nearly 40% ($5 billion) we deferred to beyond 2030 already exposed significant risk of potentially having to spend above the determination. IPART's draft decision to reduce the growth allowance by a further 23% (almost $2 billion) takes the potential total unfunded growth expenditure to about $7 billion for the period, despite credible evidence of underlying demand. As noted elsewhere, IPART's draft decisions to not accept our proposed allowances for renewals and other capex severely constrains our ability to efficiently manage risk, such that the value of unfunded growth capex could rise even higher.

Under historical regulatory settings, we would need to invest beyond our allowance and seek recovery at the next determination if more development occurs than has been forecast. While this approach has protected customers in the past from bearing the cost of uncertain development, the scale of unfunded growth is now higher. We consider IPART's draft decisions essentially close off many of the options we would otherwise consider to efficiently manage these risks. We have identified the following pathways for consideration.

2025–30 Proposal for the final determination	2030–35 What can happen next?
1. Adjust the growth expenditure allowance to reflect: a) Advice from DPHI on the Draft 2024 Sydney Housing Supply Forecast and include the expected housing for the full 5 years; b) An appropriate allowance for growth in the Illawarra region; c) An appropriate allowance for non-residential development; and d) An appropriate allowance for planning work so that we are 'plan ready' should additional growth occur in the period. 2. In the event the draft SHSF-2024 is unavailable or not accepted by IPART, include a regulatory mechanism in the final determination that would allow an in-period true-up if the location and timing of growth requires additional investment. 3. Revise the estimate of infrastructure contribution revenue to align to the underlying growth forecast adopted for the final determination	• Review IPART's infrastructure contribution pricing methodology to address features that may not allow the recovery of an appropriate share of growth expenditure from new connections as compared to existing customers. • Develop an agreed process or framework for development forecasts to allow customer engagement to proceed with greater certainty and to reduce disagreements after price proposals have been submitted to IPART.

What is the revised risk allocation in the updated proposal versus the Draft Determination

While the draft decision on growth expenditure reduces customer bills in the short term, it is almost certain that there would be a further large step change in bills in 2030, when the whole period spend is reviewed and 'trued-up' if accepted by IPART. The Draft Determination exposes Sydney Water and indirectly the shareholder, to a financing risk where Sydney Water is required to invest in the period but cannot start recovering its costs until the next period..

Core risks being addressed by growth servicing	
1. New services: new houses, businesses and other supporting developments like schools and hospitals cannot connect to water and wastewater services.	2. Existing services: 'Infill' growth overloads existing water and wastewater services, leading to poor service to customers and/or environmental damage
Compared to the draft decision, how does the updated proposal change the risk allocations?	
• **The $2 billion reduction in the growth funding in the Draft Determination is in addition to the reductions made by Sydney Water to ensure customers do not pay for growth which is not certain. While work would take place to facilitate new connections, there would be a financing risk for Sydney Water and the shareholder.** • **The inclusion of an in-period true-up mechanism helps manage this while having a low incremental impact on customer bills over 2025-30 and managing the extent of step change in bills in 2030.**	
Customers and Community ⊖ **2025-30 – neutral, with modest bill increases over the period as prudent spend is trued-up** ✓ **2030 onwards – much lower exposure to bill shock**	**Sydney Water** ✓ **2025-30 –** exposed to **lower financing risk** than under the Draft Determination ✓ **2030 onwards –** exposed to **lower reputational risk** form bill shock than under the Draft Determination

✓ = Less risk compared to Draft Determination ⊖ = Neutral risk impact compared to Draft Determination
× = More risk compared to Draft Determination

Why this delivers a better outcome

Meeting the demand for new housing is one of Australia's most urgent challenges, especially in major cities like Sydney where a shortage of supply puts pressure on affordability and fairness between generations. Reliable water, wastewater, and stormwater services are fundamental to enabling new homes and the businesses that support a growing population.

By updating the final determination to reflect the latest forecasts – or including a regulatory mechanism that supports prudent investment beyond IPART's Draft Determination – Sydney Water can confidently plan and deliver the infrastructure needed, right when and where it's required. This approach will help achieve housing targets while protecting customers from unnecessary increases in their bills. It will also provide more certainty to other stakeholders including councils and developers.

2. Pre-treatment program: Essential upgrades at our water filtration plants to ensure we can continue to meet health guidelines every day

Pretreatment

For an extra 19 cents per week (or $9 per year) per customer, we can make essential upgrades to ensure our filtration plants remain resilient during more frequent raw water quality events, and continue to deliver safe and reliable water every day

The quality of raw water from upstream dams has consistently fallen outside the design limits of our water filtration plants for much of the past decade – except during times of very low inflows. In the past ten years the operator of our largest filtration plant at Prospect has been required to reduce the rate of throughput for about 47% of the time in response to the poor quality of incoming water. As dam water is impacted by bushfire and heavy rain and requires months to settle between events, raw water quality is expected to worsen with climate change.

When raw water quality is poor, our filtration plants work beyond their design to deliver safe drinking water. To compensate for poor raw water quality the treatment plant is slowed down (which reduces throughput by 50-75%), with higher use of chemicals and energy, and increased wear and tear on equipment, leading to more frequent breakdowns and costly replacements. Such operations drive up both immediate and long-term costs. While population growth is not the main cause, it does add further strain and increases the likelihood that we will not be able to supply enough safe water to meet demand.

If our plants cannot produce enough water that meets Australian Drinking Water Guidelines, customers may be asked to reduce usage to conserve water. In severe cases, the NSW Chief Health Officer may determine that there is a risk to public health and customers would then be asked to boil their water. As population grows and more people rely on these systems, the risk of not meeting demand during poor raw water quality events – and the likelihood of boil water notices – increases.

Both reduced supply, and supplying water with a boil water advisory, risk impacts to public health, breach the Operating Licence, undermine public trust, and could lead to wider economic impacts. Boil water notices lead to a range of societal and economic impacts. They can disproportionately impact more vulnerable parts of the community in terms of physical and mental health risk, energy and bottled water costs and even scalding risk. Economic consequences may particularly fall on the hospitality, food preparation and food manufacturing sectors.

IPART reviewed the costs and benefits of the Australian Drinking Water Guidelines during the end-of-term review of our 2015-2020 Operating Licence, and this revealed a clear and very material net benefit from complying with those Guidelines due to the very high costs of not providing safe and clean drinking water.

Four separate rain events in March 2021, March 2022, July 2022 and June 2024 severely impacted raw water quality in Sydney's dams, initiating emergency operation protocols and activating the Emergency Control Centre (ECC) for three organisations – Sydney Water, WaterNSW and NSW Health. On two occasions in 2022 we asked customers in Sydney's outer suburbs to limit their use of drinking water as a

means of ensuring we could supply enough safe and clean drinking water. A third such request was narrowly averted in 2024.

Also in July 2022, 4.3 million customers were within two days of being put on a boil water alert. This was after a short period where water from Warragamba was too difficult to treat. The water levels in Prospect Reservoir became critically low before the rain stopped and it became possible to extract acceptable raw water from a very limited top layer of Warragamba Dam. During these events, all operational interventions were exhausted and the situation only resolved successfully due to luck with the weather.

Since drought ended in early 2020, we also had to call on the Sydney Desalination Plant to supply more water to our network 17 times. This alternate source of drinking water eased the pressure on treatment processes at Prospect WFP by reducing the volume to be supplied each day.

Our proposed pre-treatment program would add an extra layer of treatment to our existing plants that helps to remove contaminants from the incoming raw water, easing pressure on the downstream processes and improving our capability to manage water quality events with fewer impacts on customers.

Price Proposal	IPART's Draft Determination	Updated proposal
Improve our capability to deliver safe and clean drinking water to 3.8 million people during adverse raw water quality events by installing pretreatment processes at Prospect, Nepean, Cascade, and Orchard Hills WFPs.	Improve our capability to deliver safe and clean drinking water to around 29,000 people during adverse raw water quality events by installing a pre-treatment process for the Nepean WFP only.	Improve our capability to deliver safe and clean drinking water to 3.5 million people during adverse raw water quality events by installing pretreatment processes at Prospect, Nepean, and Cascade WFPs.
$1,131 million in capital expenditure (incl. 2024-25) $65.1 million in operating expenditure	$170 million in capital expenditure $2.2 million in operating expenditure	$941 million in capital expenditure (incl. 2024-25) $56.6 million in operating expenditure

Updated proposal

Our updated proposal is to proceed with the construction and commissioning of the three highest priority projects: Nepean, Prospect and Cascade. Nepean and Prospect have already moved into the construction phase, and work is significantly advanced on a package of works to upgrade (but not including pre-treatment at this plant) the Cascade plant to ensure it continues to comply with Australian Drinking Water Guidelines.

We also propose to continue with planning for pre-treatment works at other water filtration plants, including Orchard Hills, Warragamba, Illawarra, and Woronora, but accept that delivery may need to be deferred until the 2030–35 regulatory period. Deferring all these projects comes with an ongoing risk that customers may continue to be affected by the kind of raw water quality incidents discussed above. We will continue to liaise with NSW Health regarding potential risks to drinking water due to adverse raw water events and will bear the risk that one or more projects need to be brought forward to mitigate health risks. Without essential

upgrades, Sydney faces a much greater risk of emergency water restrictions (which have not been effective in the past) or boil water notices and loss of water supply during moderate to high rainfall events, bushfires and droughts, undermining public confidence and putting public health and wellbeing at risk.

The updated proposal will require:

- A capital expenditure allowance of $782 million for 2025–30, a reduction of $219 million or 22% compared to the Price Proposal; and
- An operating expenditure allowance of $56.6 million due to the unavailability an expanded desalination plant during the period.

We estimate the updated proposal will have a bill impact of around 19 cents a week or $9 a year, a saving of about $4 a year compared to the Price Proposal.

Looking ahead, we encourage IPART to consider alternative approaches to expenditure reviews for major projects and programs. The recent review conducted as part of IPART's regulatory process largely duplicated an assessment already completed through the Infrastructure NSW and NSW Treasury investment assurance process, yet reached notably different conclusions. We also note that AtkinsRéalis was required to review our entire Price Proposal within a timeframe typically allocated for a single business case in the INSW process.

These divergent outcomes from parallel review streams create uncertainty. We believe a more coordinated approach would strengthen both the transparency and effectiveness of future reviews.

2025 - 2030 Proposal for the final determination	2030 - 2035 What can happen next?
Accept our updated proposal to help protect more than 80% of our customers from the risks arising from adverse raw water quality events.	Consider other options or formats for the conduct of efficiency reviews. Even the possibility of different conclusions from INSW vs IPART review processes undermines confidence in the investment planning framework.

What is the revised risk allocation in the updated proposal versus the Draft Determination

The Draft Determination exposes customers and the community to significant public health risks and the wider economic impacts of boil water notices. It also increases the likelihood of a further step change in bills in 2030. The updated proposal seeks to redress the balance by reducing the risk, while acknowledging the need to manage bills in the short term.

Core risks being addressed by pre-treatment	
This program ensures that public health is not at risk and adequate safe water can still be supplied, during the more frequent raw water deterioration events Sydney dams now experience.	
Compared to the draft decision, how does the updated proposal change the risk allocations?	
With three of the four projects being funded, most customers will not be at risk from poor raw water events by 2030. In the areas served where work is deferred, the risk exposure will last until after 2030, until the work is completed.	
Customers and Community ✓ **2025-30 – most customers exposed to much lower public health risk and economic risk** than under the Draft Determination ✓ **2030 onwards – most customers exposed to less public health risk** than under Draft Determination	**Sydney Water** ✓ **2025-30 –** exposed to **much lower** operational, cost and reputational risk than under the Draft Determination ✓ **2030 onwards –** exposed to **lower risk** than under the Draft Determination

✓ = Less risk compared to Draft Determination ⊖ = Neutral risk impact compared to Draft Determination
× = More risk compared to Draft Determination

Why this delivers a better outcome

Safe, clean drinking water is overwhelmingly our customers' top priority, and a reliable supply is fundamental for daily life, public health, and a strong economy. NSW Health and other stakeholders have made clear that maintaining water for hygiene and sanitation is critical.

The Prospect Water Filtration Plant, our largest facility, provides drinking water to nearly 4.3 million people – about 80% of our customers. Cutting investment in pre-treatment does not address the current and growing risk of water quality incidents – the consequences of risk will increase with population growth and climate change.

3. Critical sewers: investing in asset replacements to protect customers and the environment from potential failure of critical sewer lines

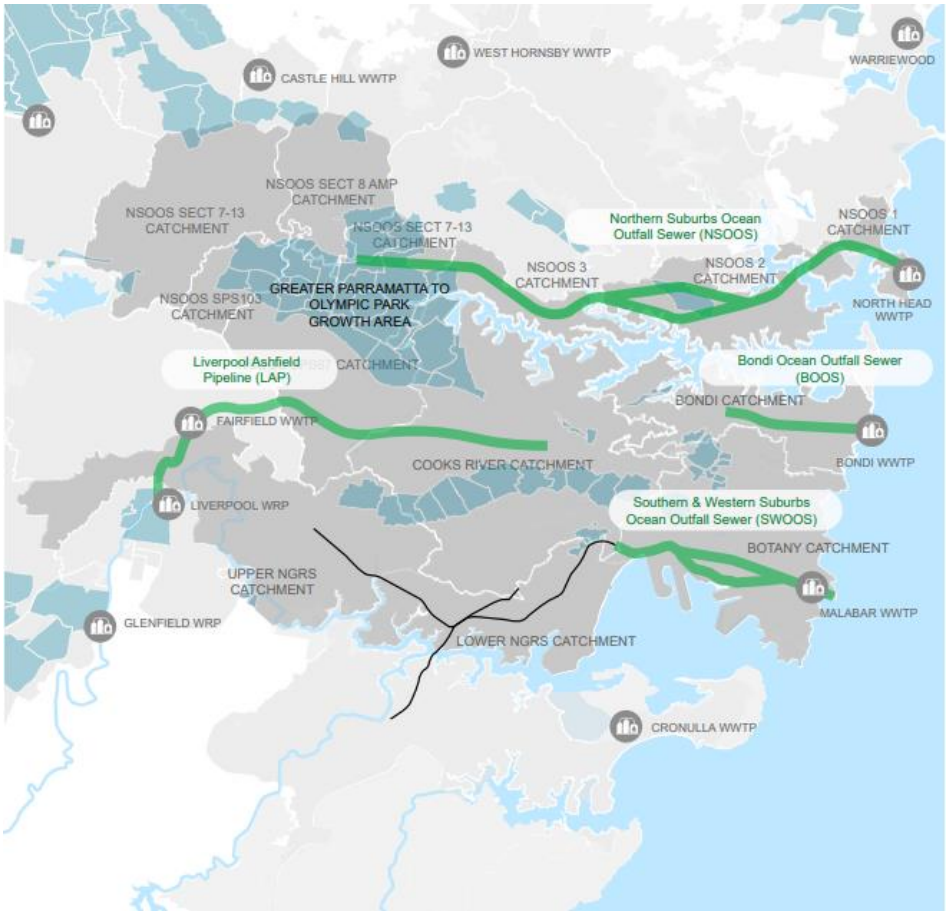
Critical sewers

For an extra 9 cents a week (or $4 a year) per customer, we can reduce the risk of asset failures and uncontrolled sewage overflows.

The Critical Sewer Program aims to maintain, renew, and/or upgrade essential sewer pipes and other key wastewater assets. The program targets ageing assets and high-risk sections of the network, aiming to prevent asset failures and uncontrolled sewer overflows, protect the environment, and ensure compliance with regulatory standards. The program plays a vital role in safeguarding public health and maintaining the long-term reliability of our wastewater network.

The program prioritises critical “avoid-fail” assets, including the Northern Suburbs Ocean Outfall Sewer (NSOOS), Bondi Ocean Outfall Sewer (BOOS), and Southern and Western Suburbs Ocean Outfall Sewer (SWSOOS) systems - some of the most essential components of Sydney’s wastewater infrastructure.

Figure 44: 80% of the city’s wastewater is transported to the coast for treatment by three very large sewer lines



A failure in any of these systems could have catastrophic consequences, including raw sewage discharges into Sydney Harbour and residential areas, widespread service disruptions affecting over three million people, and significant financial and reputational repercussions. Maintaining the capacity and reliability of these ocean outfall sewers is essential for enabling new housing upstream – integrated growth planning has assumed that this work goes ahead. As summarised in the table below, there are several critical issues that must be managed.

Table 6: Critical issues in our major ocean systems

Asset	Age	Status / condition
Bondi Ocean Outfall Sewer (BOOS)	143 years	• Services approx. 15% of Sydney's population. • Brick lining is failing in multiple locations causing silt accumulation and reducing hydraulic performance of the sewer.
South and Western Suburbs Ocean Outfall Sewer (SWSOOS)	84 years	• Services around 40% of Sydney's population. • SWSOOS Section 2 prioritised for rehabilitation consists of 2 reinforced concrete box structures a third concrete lined tunnel. • Widespread acid attack on structures and lining with fallen concrete causing silt accumulation and reducing hydraulic performance of the sewer.
Northern Suburbs Ocean Outfall Sewer (NSOOS)	109 years	• Services around 25% of Sydney's population. • The original concrete lining is failing in multiple locations causing silt accumulation and reducing hydraulic performance of the sewer.

Recent events highlight the urgent need for increased investment. In April 2025, an eight-metre section of concrete lining collapsed in the NSOOS. Just months earlier, emergency desilting had been required due to the build-up of dangerously high silt levels. This had accumulated after essential maintenance was not possible due to access issues created by frequent wet weather. Between April and June 2024, repeated overflows at Clontarf drew media scrutiny and ministerial attention, highlighting the growing risk posed by increasing the demand on ageing infrastructure while deferring maintenance.

AtkinsRéalis found the proposed critical sewer investment to be prudent but raised concerns about our capacity to deliver the full scope within the 2025-30 regulatory period, referencing delivery challenges in the 2020–24 period. We do note that delivery during the previous period was impacted by exceptional circumstances, including the COVID-19 pandemic, extreme weather, and widespread supply chain disruptions; conditions that no longer constrain the current operating environment.

Since then, Sydney Water has significantly and demonstrably enhanced its delivery capability. In FY25, we are on track to deliver over $150 million in critical sewer upgrades—more than 50% above FY24 levels. This includes several smaller packages of work already underway, alongside a major program of works on the NSOOS, one of the most complex sewer assets in the network.

For the NSOOS, we have dedicated contractors in place, working independently from other critical sewer packages to manage the scale and complexity of the program. A new access point is currently being designed to improve construction efficiency, enhance safety, and reduce long-term delivery risk.

These improvements in capability and structure support a materially stronger delivery outlook than in the previous period. The proposed reduction does not reflect the step-change in current delivery performance and risks deferring essential works, with associated environmental and regulatory risks. Our updated proposal, 22% below the original, represents a prudent, achievable investment path aligned to our demonstrated capacity and ongoing program delivery.

Price Proposal	IPART's Draft Determination	Updated proposal
Increase the amount we spend each year to rehabilitate and renew critical 'avoid fail' sewer assets, protecting customers and the environment from uncontrolled wastewater overflows.	Reduced capital expenditure for work on critical sewer assets to the average level of spending achieved in the 2020 to 2024 period.	Sustain the level of investment to that achieved in FY24-25 (forecast: $150m) and moderately increase investment by 5% a year from 2026-27 onwards.
• $222 million a year on average in capital expenditure • $1,110 million capex in total over 2025-30	• $80 million a year on average in capital expenditure • $400 million capex in total over 2025-30	• $174 million a year on average in capital expenditure • $870 million capex in total over 2025-30

Updated proposal

The updated proposal acknowledges the concerns about affordability and risk, proposing an investment level equivalent to what we delivered in the current financial year of $150 million with a very modest increase of 5% per annum after that. This is 22% below the Price Proposal. The updated proposal will have a bill impact of around nine cents a week or $4 a year, a saving of $3 a year compared to the Price Proposal.

What is the revised risk allocation in the updated proposal versus the Draft Determination

The Draft Determination exposes customers and the community to significant environmental, amenity and public health risks, and increases the likelihood of a further step change on bills in 2030. The updated proposal redresses the balance somewhat by reducing some of the risk, while acknowledging the need to manage bills in the short term.

Core risks being addressed by critical sewers

1. The program seeks to manage the risk of uncontrolled overflows that cause material harm to waterways, the wider environment, public health and in the most severe cases, to the economy.
2. The program also seeks to minimise lifecycle costs and avoid the very high costs of a major sewer collapse and recovery.

Compared to the draft decision, how does the updated proposal change the risk allocations?

- **The updated proposal seeks 86% of the original renewal capex and all growth-related maintenance opex.**
- **A high proportion of essential work will be delivered but some important renewals will be deferred. There will be some additional service and other risks; and the renewals backlog will likely mean higher reactive costs until after 2030.**

Customers and Community

✓ **2025-30 – exposed to much lower service, amenity, environmental and public health risk** than under the Draft Determination**.**

✓ **2030 onwards – exposed to lower risk of bill step change** compared to Draft Determination.

Sydney Water

✓ **2025-30 –** exposed to **lower operational, cost, compliance, prosecution and reputational risk** than under the Draft Determination

✓ **2030 onwards –** exposed to **lower risk** than under the Draft Determination

✓ = Less risk compared to Draft Determination ⊖ = Neutral risk impact compared to Draft Determination
✗ = More risk compared to Draft Determination

Why this delivers a better outcome

The criticality of these assets and risk appetite has not changed since the 2020 determination. Indeed, we consider that the risk profile has worsened during the past regulatory period due to the significant additional inflows experienced during record wet weather across 2021 and 2022, which has accelerated the deterioration of sections of critical sewers that were already failing.

Our updated proposal continues the demonstrated momentum of 2024-25 and maintains the enhanced capability in the market that we have worked hard to develop in recent years. We are prepared to accept a higher level of risk than the Price Proposal by deferring some expenditure to a future regulatory period, but have included a modest annual increase in expenditure to assist help mitigate the higher risk profile.

4. Asset renewals: Protecting customer outcomes by replacing assets that can no longer be maintained at a reasonable cost

Renewals

For an extra 21 cents a week (or $10 a year) per customer, we can reduce the risk of unplanned failures, ensure reliable service for customers, and protects the environment from pollution incidents.

All assets experience wear and tear as we use them. Assets can be kept in good condition through routine and preventative maintenance, but this can become less effective and/or more costly as the asset gets older.

Eventually, the asset may begin to experience unplanned failures that interrupt the supply of services to customers, and which lead to other connected impacts such as the uncontrolled release of water or sewage to the environment. Failures can often be repaired, however they may start to become so frequent and expensive that the more efficient choice is to replace the asset.

The goal of our asset management approach is to find the optimal balance between maintenance (opex) and renewal (capex), working within the constraints of any regulatory requirements (eg, limits on the number of unplanned outages) and the preferences and willingness-to-pay of end-use customers.

A utility operating towards the reactive end of the spectrum will tend to favour maintenance solutions, accepting more incidents and performance failures in the short-term in order to defer the cost of major capital replacements to a future period. This can also be the approach of utilities with newer asset portfolios that do not yet experience many failures. Taken to an extreme, this strategy continues until a reactive replacement after complete asset failure is the only solution remaining.

With an older asset portfolio, relying on this approach becomes untenable as inter-connected failures on the network can trigger other failures. In such systems, key assets must be managed with greater levels of reliability and some proactive work.

This balanced approach seeks to carefully assess the trade-offs between more frequent failures and the cost of replacement, minimising total costs over the life of the asset.

Why this is important

Sydney Water is concerned that the Draft Determination has taken the lower bound of AtkinsRéalis recommendation in all asset classes, with significant deferral of asset renewals until after 2030.

The Draft Determination also includes reductions to our proposed maintenance opex which would ordinarily have the impact of bringing forward some renewals into the 2025-30 pricing period. Having squeezed our expenditure allowances on both opex and capex sides, the likely outcome is that only ‘reactive renewals’ will be completed once an asset has completely failed and maintenance or repair is no longer viable. In the meantime, failures will become more frequent and increasingly costly. This strategy will not be the lowest cost management option for customers, but with not enough envelope of opex or capex left to efficiently re-

prioritise within IPART's draft decisions means it is likely to be the only feasible option. This strategy will also result in significant customer impact in terms of disrupted water supply, unsafe safe drinking water, or unplanned discharge of wastewater to the environment.

With a deteriorating asset base, a backward-looking reactive approach materially increases risk to asset and service performance over time, as can be observed currently in other jurisdictions such as the UK. There is a risk of reaching a tipping point where it is not possible to recover performance without significant financial and customer impact.

Our concerns with the proposed reductions in renewal expenditure cover three broad areas:

1. Water filtration plants, water resource recovery facilities, water and wastewater networks;
2. A collection of water assets that will be critical to any future option involving additional rainfall independent water sources being added to the broader network; and
3. Replacement of water meters.

Water filtration plants, water resource recovery facilities, water and wastewater networks

From 2008 to 2020, Sydney Water committed to 'absorbing' all maintenance opex increases despite the addition of an extra 1 million people using our services. This resulted in an unsustainable level of maintenance on core assets.

In focus: Wastewater pumping stations and rising mains

For the last three years Sydney Water has not met EPL (dry weather overflow) performance limits exposing the public to health risks on 98 occasions with 39 of those causing environmental harm to waterways. EPA has prosecuted on multiple occasions and imposed a mandatory audit with 11 actions designed to drive a proactive maintenance and renewal strategy. Our proposed renewals program still leaves 93% of poor condition wastewater pumping station assets to operate as run to fail.

When funding for the maintenance of an asset is reduced the effective life of that asset decreases and the replacement date occurs sooner. Depending on available redundancy (or lack thereof) in the system, there may only be sufficient capacity to allow for a short term 'interim renewal' to buy sufficient time for a more planned renewal.

This scenario of a 'double renewal' to restore normal operation consumes any 'cost savings' that may have been achieved by keeping the asset in service through to complete failure. Sydney Water has been building its effectiveness in identifying important assets at risk of failure, based on condition, risk and performance, to limit this type of reactive scenario (refer Richmond Reservoir Case Study in Attachment 2). IPART deemed our spend in this period to be prudent and efficient. The Price Proposal is also built on this thorough and consistent approach

Sydney Water is not proposing a material change in service outcomes to customers or to deliver an 'improvement' in the level of risk. Rather, the Price Proposal was based on condition assessment and performance data to target the worst assets with the aim of avoiding compliance breaches and adverse customer outcomes from large-scale unplanned failures.

Importantly, the proposed renewal volume together with the proposed maintenance opex step change provides the balanced approach in meeting customer outcomes, as well as being directly impacted by interrelated asset class renewals within the delivery systems. For example critical sewer renewals and WRRF renewals have an interrelationship on how sewage flows are managed, when undertaking maintenance. (Refer North Head Case Study in Attachment 1). Similarly WFPs, Reservoirs, and Growth programs all have inter-relationships in sequencing capital and maintenance works within the live operational assets to ensure continuity of supply to customers, which can impact delivery timing and therefore cost of both opex and capex in the interim.

Because of the impact on public health, water reservoirs and water filtration plants will be prioritised for limited funds and asset classes like WWRFs will continue to be run to fail (currently plan is 79% of poor condition assets are run to fail). While we always aim to comply with regulatory requirements, there is a high likelihood that pollution to waterways will increase. For example, over the past five years, there were 82 non-compliant bypasses resulting in 20 instances where EPA considered legal action on behalf of the community due to the resulting environmental harm. The proposed reductions will almost certainly result in further deterioration and worsening non-compliance of wastewater Operating Licence performance, and Sewerage Treatment System licence non-compliances such as pollution and environmental harm incidents, load and concentration limit breaches, and non-compliant bypasses.

In focus: Water Reservoirs

The proposed draft reduction in renewals will result in 13 reservoirs serving 350,000 customers with known poor condition being further delayed for renewal, significantly increasing risk of foreign contaminants with public health impacts and/or structural failure leading to disruption to supply. Proposed renewals will still leave 64% of poor condition assets as run to fail.

Resilient and reliable water distribution network

Through our long-term planning to date, we have identified that the area served by the Prospect Water Filtration Plant will be critical in any future system configuration that includes additional rainfall independent supplies. Furthermore, we have also identified several key assets that will be essential to the efficient management of the total system. However, as outlined in the following table, some of these key assets are more than 100 years old and represent a critical risk in the current water system.

Table 7: Critical issues with drinking water assets needed to maintain system reliability and support rainfall independent supplies

Asset	Age	Status / condition
Watermain WMN01 (1800mm diameter)	137 years	• Decommissioned in 2014 due to poor condition but will be needed in a future configuration with RFIS and to support other major asset renewals • Lead in each one of its 2000 joints
Watermain WMN02 (1800mm diameter)	125 years	• Operational but condition is poor with constant leaks through corroded joints • Running at reduced pressure to manage risk
Watermain WMN03 (1800mm diameter)	100 years	As for WMN002
Distribution chamber at Potts Hill	100 years	• Operational but condition is poor • One wall held in place by temporary brace

At any point in time, the two currently operating mains are carrying 40 million litres of water at high pressure. This aged infrastructure runs for 7km through populated areas in suburbs including Potts Hill, Sefton, Regents Park and Guildford, crossing many main roads controlled by Roads and Maritime Services and local councils, two Transport NSW railway lines and TransGrid 330kV transmission. Along the route are also numerous schools, places of worship, small businesses, commercial business parks and recreation areas.

A main failure would lead to extensive local flooding and, depending on the specific location of a break, there could be a risk of:

- Injury or loss of life.
- Property damage.
- Extensive disruption to rail and/or road transport.
- Damage to the other above-ground mains in the same corridor.

Depending on the extent of damage, there could be a loss of water supply to downstream parts of the system, affecting 2 million (watermains) to 3.5 million people (distribution chamber).

Renewal of these critical assets is an essential part of our long term system plans and also support the introduction of additional sources of rainfall independent water to Sydney's networks, whether that be through an expanded desalination or through the introduction, subject to Government approval and social licence, of purified recycled water (PRW). Importantly, new rainfall independent sources such as desalination and PRW may not be an either/or decision, and it is possible that both will be needed in the future.

Extensive planning is needed as delivery is likely to consist of a three to four year program of works requiring multi stages of new pumping stations, pressure tunnel, reservoir storage, and pipeline construction within the existing easement but adjacent to other in-service mains. The 7km route includes 20 bridge crossings, with complex interactions with other major infrastructure, including roads, high voltage electricity and rail transport crossings. The timing of the required investigations and planning work is not dependent on

decisions regarding the expansion of the desalination plant. The assets in questions are already in critical need of remediation to support upcoming essential maintenance on other major assets.

Water meters

Sydney Water is required to replace 176,500 of its customer meters each year as they reach the end of their useful life[3]. This presents an opportunity to replace these assets with more cost effective smart meters that will enable $318.6m in customer benefits and a better customer experience over the next 10 years.

If we instead replace these meters with traditional meters, we will not get another opportunity to upgrade these assets for 20 years, once they reach the end of their useful life.

IPART's draft decision only allows $75 million of capex to replace end of life meters with like for like mechanical meters, and no increase in operating expenditure. The gap between our BAU meter replacement cost and IPART's draft decision would result in the revenue allowance only being sufficient to allow for 30% of meters at their end of life to be replaced with traditional meters. This is an inefficient level of meter replacement, as the cost of lost revenue and leaking water will more than outweigh the savings in meter replacement costs and other impacts such as bringing forward new sources of supply or extra water conservation.

Price Proposal	IPART's Draft Determination	Updated proposal
Renewals: Water filtration plants, water resource recovery facilities, water and wastewater networks		
Maintain the 2024-25 expenditure on renewals to continue to renew critical assets in the worst condition and/or as they fail. The 2024-25 spend has been assessed as prudent and efficient by IPART.	Reduce expenditure by 34% ($252m p.a.) compared to the prudent level of spend in 2024-2025. In some asset classes proposed spend matches that from 2016-2020 period despite 275,000 more properties and $7.4B asset base	Reduce the proposed expenditure to $619m p.a. , 16% ($114m) below 2024-25 expenditure level. Rely on maintenance opex (provided it is not cut). Attempt negotiating relaxation of regulatory controls
$3,592 million capex in total over 2025-30	Reductions of 31% on average across all asset classes. $2,484 million capex in total over 2025-30	Reduction of 14% on average. $3,096 million capex in total over 2025-30
Renewals & Desalination network augmentation: resilient and reliable water supply		
Rehabilitate or renew existing critical water network assets to improve our ability to reliably operate the water system, including accepting water from an expanded desalination plant and/or other new sources of rainfall independent supply.	Defer all expenditure relating to our ability to accept water from an expanded desalination plant.	Undertake planning work and early contractor involvement in potential solutions so that we are 'shovel ready' to initiate delivery of work on critical system assets.
$828 million in capital expenditure	$0 in capital expenditure	$58 million in capital expenditure

3 Generally defined as the point at which the amortised loss of revenue due to meter inaccuracy exceeds the cost of replacing with a new meter.

Price Proposal	IPART's Draft Determination	Updated proposal
Renewals: water meters		
Start a generational switch to new technology by installing smart meters as the preferred solution for the 176,500 mechanical meters that are due to be replaced each year to 2030.	Continue to deliver like-for-like replacements using only mechanical meters, at a lower unit cost than proposed.	No change to the Price Proposal, but we note that the benefits of a change to smart meters are larger under a higher water usage price.
Total $318m capex (incremental $169m) and $58m opex[i] over the next 5 years.	$75m in capex and a $0 Step to operating expenditure to deliver like-for-like replacements.	$318m capex and $58m opex over the next 5 years.
Enabling $290m in customer benefits over the next 10 years.	We estimate only 30% of meters could be replaced under IPART's Draft Determination. Forgoes $295 million in customer benefits, and increases non-revenue water over time.	This enables $295m[ii] in customer benefits over the next 10 years, exceeding the additional $169m of capex and $8m in opex incurred to deliver this option.

Please note that

i: Opex in the above figures represents the total base, trend and step opex for this servicing option over the next 5 years.

ii: Alternative benefits are higher than the Price Proposal due to IPARTs higher draft water usage charge

Updated proposal

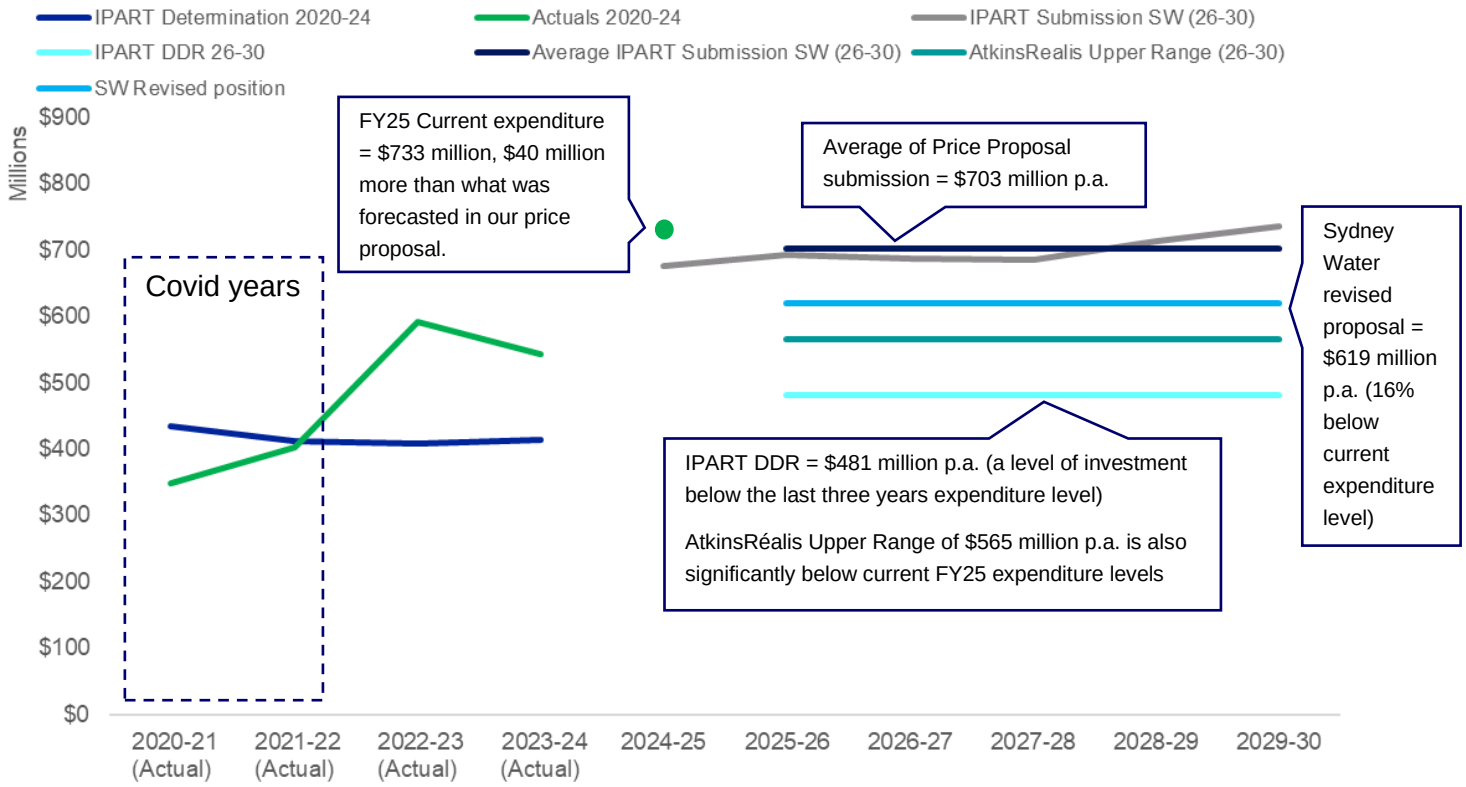
The scope of necessary renewals is shaped by our Service Excellence program, which has facilitated the advancement of our Asset Management System. This includes the formulation of detailed maintenance and renewal requirements from the ground up.

The Service Excellence program was introduced in response to four consecutive years of failing IPARTs asset management audit. This program has now been acknowledged as key driver for Sydney Water meeting IPART asset management requirements and has been recognised as leading by the Water Services Association of Australia in recent benchmarking.

In finalising the Price Proposal, we carefully reviewed trade-offs between operating expenditure and capital expenditure solutions, assessing the risks, benefits and consequential impacts of different options. We also had regard to the deliverability of the work, from both an internal and supplier perspective, and relevant industry benchmarks. Through this process we were able to reduce proposed renewals by $2.4 billion.

While we stand by the need for these renewals, and our original reduced position of $3.6 billion in the Price Proposal, we propose a further reduction on this number of $0.5 billion to bring a total renewal pool to $3.1 billion.

Figure 5: Comparing asset renewal expenditure under IPART's Draft Determination and our updated proposal



2025 – 2030 Proposal for the final determination	2030 - 2035 What can happen next?
Renewals: Water filtration plants, water resource recovery facilities, water and wastewater networks	
Wastewater pumping station renewals and reservoir renewals Limited number of other asset class renewals (typically only work already contracted with delivery partners). If reactive renewals outside of these minimums are required, overspend the budget (and resulting customer bill pressure in next regulatory period)	Some of the already heavily reduced volume of water resource recovery facility, water filtration and stormwater renewals.
Renewals: resilient and reliable water supply	
Include $58 million in our capital expenditure allowance.	Develop a regulatory mechanism to allow Sydney Water to recover the efficient costs associated with a future expansion of the Sydney Desalination Plant, including network upgrades needed to facilitate that expansion.
Renewals: water meters	
176,500 water meters must be replaced each year over the next 5 years, as the cost of keeping them (lost revenue and water leaks) outweighs the cost of replacement. Our expenditure allowance must allow for an efficient level of meter replacement. We consider it prudent for these to be smart meters.	880,000 water meters must be replaced in the following 5 years. Delaying replacements during 2025-30 will create an unsustainable backlog and higher non-revenue water

What is the revised risk allocation in the updated proposal versus the Draft Determination

Please note this risk assessment is for Renewals and Operational Expenditure

The draft decision exposes customers and the community to more frequent and disruptive service interruptions as well as environmental, amenity and public health risks. A further step change in the bill in 2030 would be certain. The updated proposal redresses the balance by reducing some of the risk, while acknowledging the need to manage bills in the short term.

Core risks being addressed by renewals	
1. These sustaining renewal and maintenance programs work in balance as a total package to provide the right levels of services. They manage the environmental, health and amenity risks of wastewater overflows, the public health risks of unsafe drinking water and the public safety risks relating to stormwater flooding.	2. The program also seeks to minimise lifecycle costs and avoid the inefficient levels of reactive work.
Compared to the draft decision, how does the updated proposal change the risk allocations?	
• **With 69% of the original funding for renewals, and 44% for maintenance, the most essential work can be delivered, but some important work will not.** • **There are implications but these are much less severe than under the draft decision - pollution events are still possible; and the work backlog will likely mean higher reactive costs until after 2030.**	
Customers and Community ✓ 2025-30 – **exposed to much lower environmental and public health risk** than under the Draft Determination. ✓ 2030 onwards – **exposed to lower risk of bill step change**.	**Sydney Water** ✓ **2025-30 –** exposed to much lower operational, cost, compliance, prosecution and reputational risk than under the Draft Determination ✓ **2030 onwards –** exposed to **lower risk** than under the Draft Determination

✓ = Less risk compared to Draft Determination ⊖ = Neutral risk impact compared to Draft Determination
✗ = More risk compared to Draft Determination

Why this delivers a better outcome

A proposed pathway of $619 million a year for renewals of water filtration plants, water resource recovery facilities, water and wastewater networks, stormwater, and property is over $114 million less or 16% below what we are currently required to invest to sustain performance and manage risk at current levels, and what was deemed in the current period to be prudent and efficient by the efficiency reviewers. It delivers a bill saving compared to the Price Proposal of 19 cents a week (compared IPART's 29 cents a week).

Our proposed approach maintains our original proposed funding to Water Reservoirs and Waste Water Pumping stations where we feel the largest direct public health impacts to customers are. It puts more risk on Sydney Water to balance the absolute just-in-time timing of renewals and to drive efficiency from necessary maintenance to maximise life of the asset.

For our resilient and reliable water supply program, completing the base engineering work to deliver asset replacements and upgrades is a no regrets pathway, considering the criticality of the underlying assets, their current condition, and their critical role in efficient management of the water network including under a future scenario that includes additional rainfall independent supply.

In relation to water meters, IPART's draft decision would not only represent a worse outcome for customers than the Price Proposal, it would result in a worse outcome than the current regulatory period due to a growing stock of inaccurate meters. The roll-out of smart meters was an important part of our Cost Efficiency Strategy as it enabled the achievement of a wide range of benefits for Sydney Water and its customers.

5. Operating expenditure: an allowance that reflects unavoidable increases to enable continued delivery of safe, reliable services for customers

Operating expenditure

For an extra 58 cents per week (or $30 per year) per customer, we can support the infrastructure needed to meet growth and ensure our water and wastewater systems are resilient for years to come.

Why this is important

Operating expenditure covers everything required to keep Sydney's water and wastewater systems running smoothly – field crews maintaining pipes and pumps, treatment plant officers operating and maintaining the water and wastewater facilities, office-based staff supporting customers, essential supplies like chemicals and energy, and the digital tools that monitor and manage the networks every day. This ongoing work ensures we can reliably deliver safe water and wastewater services to 5.4 million people, 24/7.

Over the next five years, the Price Proposal sought $7.0 billion in core operating expenditure to continue these business-as-usual activities and to support some key customer, government and business priorities. These priorities included ensuring a safe and secure water supply, supporting growth in line with the NSW Government's housing policy, protecting our waterways from pollution, improving asset and service performance through increased investment in maintenance, and enhancing our digital security and capabilities.

Greater Sydney is one of the fastest-growing cities in Australia, with the population set to reach 8 million people over the next 40 years. We play a vital role in supporting this growth, by ensuring that there is essential water, wastewater and some stormwater services available to new customers. Over the next five years, we have planned delivery of major projects in Upper South Creek (new facility), Greater Parramatta and Olympic Peninsula (GPOP) (new facility), upgrades to Bingara Gorge for growth and compliance (a recently acquired facility) and servicing of major growth precincts in the North West and South West. Approximately 140 kilometres of greenfield trunk mains and many new pumping stations will also come into service in Western Sydney over the next five years.

More people and businesses mean more drinking water and wastewater, and we must meet more stringent standards for both compared to the past. Many of our key inputs have been increasing in price, including electricity and chemicals, and we also need to expand our customer support and billing capability for a growing customer base. In total, we estimate that we require an additional $296 million in operating costs over the next five years.

At the same time, essential maintenance work is required, in conjunction with renewals, to ensure the resilience and performance of the current water, wastewater and stormwater systems. While our service and environmental performance has been improving over the last few years, there is still more critical work to be done in areas such as water continuity, leakage, dry weather overflows and chokes, particularly as the assets continue to age and extreme weather events become more common. We have already adopted a 'run to fail' approach for a vast majority of assets, deferring renewals until it is no longer possible to efficiently manage the risk to service outcomes and customers bills. The Price Proposal sought an additional $244 million for maintenance over the next 5 years. This reflects the **lowest** amount of operating expenditure possible to prolong critical assets with extra preventive work or reactive repairs and address failures when they occur.

Impact of Draft Determination on customers

We are pleased that IPART has accepted many aspects of the Price Proposal for operating expenditure, including our commitment to deliver an 0.7 per cent per year efficiency factor, which will generate some $179 million in savings for customers over the next five years. In addition to our one-off, business-wide efficiency stretch target, adjusted by IPART to $208 million, this efficiency factor will provide a strong incentive for us to carefully manage our costs, reducing the pressure on customer bills while still delivering safe and reliable services.

We however have concerns that some of IPART's draft decisions to reduce our growth and maintenance operating expenditure will not provide enough funding to continue providing the level of service our customers expect, and will severely constrain our ability to comply with regulatory requirements.

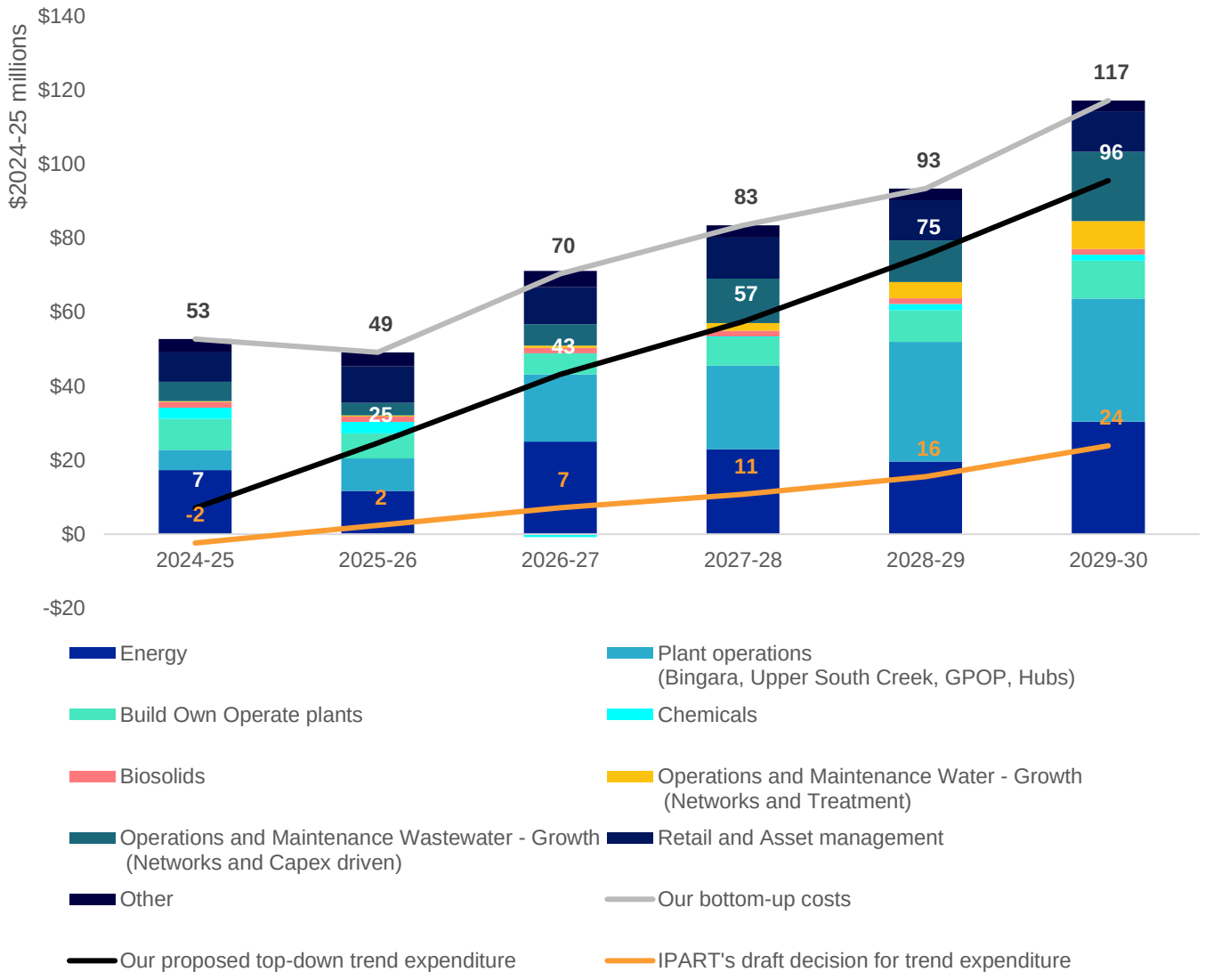
IPART's draft decision to allow $59 million in growth-related costs represents an almost 80% reduction to our proposed expenditure of $296 million over 2025-30. As shown in Figure 6, this means we would not even be able to recover our additional energy costs from growth and market price changes, every year – for the next five years. Alternatively, IPART's allowance would only cover 60% operational costs for the major growth projects at Upper South Creek, Bingara Gorge, Sydney Olympic Park Authority (SOPA), Greater Parramatta to Olympic Peninsula (GPOP), which alone amount to $99 million over next 5 years. Having exhausted IPART's allowance by $40 million, this leaves no room for other rising costs such as chemicals and biosolids, Build-Own-Operate (BOO) costs, or customer support and billing costs to service the growth in our customer base.

If operating expenditure increases do not keep pace with the level of new connections, customers are likely to experience a longer response time when they call Sydney Water for help, or when our crews need to fix a fault in system assets. Customers – new and existing – may be without water for longer, and/or experience other inconveniences such as increased traffic congestion, or damage to property and the environment, while we repair faults.

On maintenance, IPART has made a draft decision to allow $107 million, which is effectively a 56% reduction to our proposed expenditure of $245 million over 2025-30. If our proposed operating budget for maintenance is reduced, this will slow down repairs, limit preventative maintenance, and stretch our resources thinner. This can mean immediate impacts for customers in the form of reduced service level performance and a higher risk of boil water alerts, and for the broader community, increased dry weather wastewater overflows and a greater risk of pollution at beaches and waterways. In the long-term, an

unsustainable level of maintenance further increases the risk of system failures, resulting in more frequent and costly emergency repairs or replacements. These unplanned expenditures are likely to lead to higher customer bills in future regulatory periods, potentially outweighing any short-term savings achieved under IPART's draft decisions.

Figure 6: Our bottom-up forecast costs and proposed trend expenditure, relative to IPART's draft decision for trend expenditure ($2024-25 millions)



Price Proposal	IPART's Draft Determination	Updated proposal
Increase expenditure compared to the 2023-24 base year with an allowance that increases in line with growth in new connections, identifiable step changes / new requirements, general price trends for labour and other costs, minus assumed cost savings from internal efficiency initiatives.	Accept Sydney Water's proposed efficiency savings. Deduct the following amounts from The Price Proposal: • Bulk water costs: $516 million • Base cost: $2 million a year • Trend: $237 million (costs rise in line with volumes rather than connections) • Step: $160 million	Accept IPART's updated bulk water costs. Request IPART consider the scale of these reductions and adopt an approach that better reflects the evidence provided in our submission, ensuring the long-term reliability, resilience, and affordability of water and wastewater services for all customers.
Bulk water costs: $2,921 million Base: $5,980 million Trend: $296 million Step: $383 million (net of step efficiency) Other non-controllable costs: $295 million Total: $9.9 billion for 2025-30	Bulk water costs: $2,406 million Base: $5,970 million Trend: $59 million Step: $432 million (gross) Other non-controllable costs: $295 million Total: $8.9 billion for 2025-30	Bulk water costs: $2,406 million Base: $5,980 million Trend: $296 million Step: $325 million (net of step efficiency) Other non-controllable costs: $295 million Total: $9.3 billion for 2025-30

Updated proposal

We propose to re-instate our trend operating expenditure of $296 million, on the basis that it represents a prudent and efficient level of our growth-related costs and price changes in inputs. In determining these costs, we applied two approaches:

1. A robust bottom-up budget estimation process, and
2. Using IPART's top-down trend methodology under the new 3Cs framework, supplemented by our understanding of best regulatory practice in other jurisdictions.

We cross-validated the two cost estimates and further ensured that our business could deliver the outputs of the top-down forecast at a business group-level. We consider that IPART's draft decision, which reduces our proposed costs by 80%, imposes an unacceptable level of risk on customers and other stakeholders. We believe IPART's advisors have not sufficiently engaged with our bottom-up costs, and in some cases, the approach departs from established regulatory precedent in other jurisdictions.

In particular, we are concerned with IPART's draft decision to reduce our proposed output growth rate of 1.4% to just 0.7% for water, stormwater and corporate services and 1% for wastewater. This adjustment does not adequately reflect the complexity, scale and growth expected of our servicing area nor the robustness of our forecasting methodology. We service one of Australia's largest metropolitan regions with high concentrations of urban development and infrastructure expansion to service the growing population. Despite this, our revised growth rate is now among the lowest awarded nationally.

We also propose to re-instate our additional step operating expenditure of $245 million for maintenance over the next 5 years. We have already conducted a rigorous and comprehensive assessment of our asset class condition, asset performance (i.e. critical incidents/near misses), and explored the potential to defer and/or

run asset to failure. While we have accepted some of IPART's reduction in renewals, we require all of our proposed step maintenance opex to prolong the life of our critical assets and address failures when they occur. Further analysis and supporting evidence for these positions is in Attachment 2 of this response.

2025 - 2030 Proposal for the final determination	2030 - 2035 What can happen next?
We are at a critical point in time, where we are expecting significant customer growth, with the challenges of an aging asset base and extreme weather events becoming more common. Our expenditure allowance must allow for a sufficient level of operating expenditure to meet growth and greater maintenance to ensure our water and wastewater systems are resilient for years to come.	Provide further guidance to utilities and other participants on the Base-Trend-Step (BTS) framework to ensure alignment on principles and approach including forecast validation.

6. Tax allowance: a revenue allowance that permits us to recover the cost of an on-going regulatory obligation

Why this is important

Assets Free of Charge (AFOC) (also known as non-cash capital contributions) are assets we receive for free. Most free assets come from developers who construct the local, small diameter pipes that allow each property in their development to receive services, which are handed over to us at zero cost on completion. The Price Proposal included an AFOC forecast of around $250 million a year.

The value of AFOC we receive is considered assessable income under the National Tax Equivalent Regime (NTER) administered by the Australian Taxation Office (ATO) and therefore increases our tax payments. Like any other company, we need a mechanism to recover the cost of taxes.

IPART's draft decision is to assume that AFOC is not assessable income under the NTER, applying a $0 tax allowance for these assets. The draft decision relies on the Federal Court of Australia's ruling from Victoria Power Networks Pty Ltd v Commissioner of Taxation [2020] FCAFC 169, which found that features of the regulatory framework applying to VPN mean that no assessable income arises from non-cash capital contributions. It is our view that this case applies under different circumstances and conditions to Sydney Water's existing regulatory regime.

Price Proposal	IPART's Draft Determination	Updated proposal
Our revenue requirement includes an amount to recover income tax payable on the value of AFOC under the NTER.	Set the income tax allowance relating to AFOC to $0 on the assumption that the NTER will be amended to exclude the value of AFOC as assessable income.	No change on the Price Proposal.
Taxable income from AFOC: $1,237 million	Taxable income from AFOC: $0	Taxable income from AFOC: $1,235 million[4]

Updated proposal

In their review of Hunter Water prices from 1 July 2025, IPART made a draft decision to consider setting the tax allowance relating to AFOC to $0. This position was revised in its final decision, as IPART accepted that the uncertainties surrounding the tax implications of AFOC are too large to warrant a pre-emptive removal of the tax allowance from the NRR. As such, IPART have maintained their usual approach of including a tax allowance for AFOC in Hunter Water's prices. While there are minor process differences between us, we broadly agree with Hunter Water's submission and ask this treatment of including tax allowance for AFOC be also applied in our final determination.

4 Figure is slightly different from the Price Proposal due to minor change in forecast through the review process, and IPART updating our true up of AFOC holding costs, which we accept.

Updated proposal

This section details Sydney Water's revised expenditure allowances and outlines the implications of re-instating expenditure on its revenue requirement, the prices it will need to charge, the bills customers will need to pay and the implication of inaction on our customer outcomes. Each of the following sections are supported by attachments which provide further justification and information for our projects and regulatory assumptions that underpin these tables.

Expenditure Allowance

Table 8: Proposed Infrastructure Capital Expenditure

Investment Program *($m, 2025-30)*	Sydney Water Price Proposal	IPART Draft Determination	Sydney Water updated proposal
Growth servicing	$8,326	$6,441	**$8,326**
Mamre Road / Aerotropolis	$1,441	$860	**$860**
RRWS – Desalination water network	$828	$0	**$58**
RRWS – PRW	$478	$431	**$431**
Pre-treatment Program *(incl. 2024-25)*	$1,131	$170	**$941**
Critical sewers renewals	$1,110	$400	**$870**
Sustaining capital renewals	$3,592	$2,484	**$3,096**
Digital Meters	$293	$75	**$293**
Compliance / Improvement	$379	$342	**$342**
Portfolio Adjustment	-$1,461	-$1,461	**-$1,148**
Total *(incl. 2024-25 for pre-treatment program)*	**$16,116**	**$9,742**	**$14,069**

Table 9: Proposed Operating Expenditure

Operating expenditure *($m, 2025-30)*	Sydney Water Price Proposal	IPART Draft Determination	Sydney Water updated proposal
Base	$5,980	$5,970	$5,980
Trend	$296	$59	$296
Step (including step efficiency)	$383	$194*	$325
Other non-controllable costs (excluding bulk water)	$295	$295	$295
Total core operating expenditure	$6,956	$6,518	$6,896
WNSW bulk water costs	$1,717	$1,226	$1,226
SDP bulk water costs	$1204	$1,178	$1,178
Total bulk water costs	$2,921	$2,406	$2,406
Total operating expenditure	$9,877	$8,924	$9,302

*Note: IPART's Draft Determination only provided a gross step of $431.6 million over 2025-30, without including its adjustment to our proposed step efficiency. Based on available numbers in IPART's Draft Determination and our reconciliation, we have estimated IPART's draft decision regarding net step changes, including an adjusted step efficiency, as $194 million over 2025-30.

Revenue required

IPART's total draft notional revenue requirement (NRR) across 2025-26 to 2029-30 is $17,632 million, or around 12% lower than our Price Proposal. This is mainly driven by reductions in the weighted average cost of capital, and draft decisions reducing bulk water costs, our core operating expenditure, capital expenditure and tax allowance.

We have revised the draft NRR to reflect our responses on IPART's Draft Determination. This results in the following changes to the revenue requirement. It is now $18,528 million, being 5% higher than IPART's Draft Determination.

We recommend IPART review the infrastructure contribution forecasts to ensure they align with the updated expenditure allowances to be included in the Final Determination and also use the updated forecasts in the assessment of Sydney Water's financial viability assessment.

Table 10: Sydney Water's proposed notional revenue requirement ($2024-25, $million)

	2024–25*	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2026-30
Operating expenditure	1,147	1,199	1,234	1,245	1,265	1,289	6,232
Bulk water costs	598	615	605	605	607	608	3,040
Return on assets	854	956	1,023	1,079	1,126	1,171	5,355
Regulatory depreciation	604	541	593	644	686	724	3,187
Return on working capital	11	10	12	15	16	16	70
Tax allowance	64	27	15	11	6	3	63
Adjustments for DVAM/True Ups	0	581	0	0	0	0	581
Notional revenue requirement	3,277	3,929	3,482	3,599	3,706	3,812	18,528
Difference from IPART report ($m)	-18	80	137	191	225	264	896
Difference from IPART report (%)	-1%	2%	4%	6%	6%	7%	5%

Revised prices for water, wastewater and stormwater services

IPART has proposed a series of changes to the six charges that drive 98 per cent of our regulated revenue. For wastewater, these changes reflect a reduction in the regulated revenue, while for water and stormwater, these changes reflect both a reduction in regulated revenue and a change to the tariff structure.

We support IPART's draft decisions to changes to tariff structures. However, we are proposing several changes to expenditure allowances for consideration by IPART as it develops a final determination. The revised prices in this section reflect the impact of our recommended changes.

Table 11: Sydney Water's proposed prices ($2024-25)

	Units	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30
Water charges (Service charges for 20mm meter)							
Water usage	$/kL	$2.67	$3.10	$3.20	$3.30	$3.40	$3.50
Water service	$/year/meter	$67.04	$91.13	$91.13	$91.13	$91.13	$91.13
Wastewater charges (Service charges for 20mm meter)							
Wastewater usage	$/kL	$1.36	$1.41	$1.41	$1.41	$1.41	$1.41
Unadjusted wastewater service	$/year/meter	$552.62	$641.57	$662.67	$710.84	$761.46	$814.67
Stormwater charges							
Stormwater service (not within a multi-premises)	$/year	$88.18	$99.73	$99.73	$99.73	$99.73	$99.73
Stormwater service (within a multi-premises)	$/year	$28.19	$31.88	$31.88	$31.88	$31.88	$31.88

Amended price path and bill impacts

Sydney Water proposed a price path that incurred a 18% bill increase in year one followed by a uniform increase in the following years. After accounting for the revised expenditure allowance, IPART have opted to spread the initial increase over the two years to smooth increases to customers. Sydney Water accepts this approach and the bill impact modelling in Table 12 reflects this method. However, we note that there are many possible combinations that could be used and further smoothing of the price path could also be appropriate.

Table 12: Price path comparison between the Price Proposal and Draft Determination

	2025–26	2026–27	2027–28	2028–29	2029–30
Sydney Water's proposed % YOY increase to a typical customer	18.0%	6.7%	6.8%	6.8%	6.8%
IPART's Draft Determination % YOY increase to a typical customer's bill	6.0%	5.6%	3.8%	3.8%	3.7%
Sydney Water's updated proposed %YOY increase to a typical customer's bill	10.9%	6.5%	3.9%	3.9%	3.9%

Table 13: Bill impacts of our updated proposal for owner occupiers ($2024-25)

Household Type	Water usage (kl/year)	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Average 2026-30
Small household (IPART)	100	$953	$993	$1,046	$1,088	$1,132	$1,117	$1,087
Small household (Updated)	100	$953	$1,053	$1,120	$1,166	$1,214	$1,264	$1,163
Typical Apartment (IPART)	160	$1,113	$1,173	$1,238	$1,286	$1,336	$1,387	$1,284
Typical Apartment (Updated)	160	$1,113	$1,233	$1,312	$1,364	$1,418	$1,474	$1,360
Typical household (IPART)	200	$1,220	$1,293	$1,366	$1,418	$1,472	$1,527	$1,415
Typical household (Updated)	200	$1,220	$1,352	$1,440	$1,496	$1,554	$1,614	$1,491
Large household (IPART)	300	$1,487	$1,592	$1,686	$1,748	$1,812	$1,877	$1,743
Large household (Updated)	300	$1,487	$1,652	$1,760	$1,826	$1,894	$1,964	$1,819
Pensioner with rebate (IPART)	100	$354	$375	$396	$411	$427	$443	$410
Pensioner with rebate (Updated)	100	$354	$387	$412	$427	$442	$457	$425
Pensioner without rebate (IPART)	100	$953	$993	$1,046	$1,088	$1,132	$1,177	$1,087
Pensioner without rebate (Updated)	100	$953	$1,053	$1,120	$1,166	$1,214	$1,264	$1,163

Rouse Hill Land Charge

The Price Proposal included a phased approach to remove the long-standing Rouse Hill Land Charge, which was introduced as an alternative pathway to cost recovery when the Government introduced the zero developer charge policy in 2008. Even though a phased approach does have higher complexity and marginally higher cost to implement than abolishing all future land charges from 1 October, we considered it would not be equitable to provide a discount to over four thousand customers who had only partially paid this charge when over ten thousand of their neighbours have paid the land charge in full.

We do not agree with IPART's assertion that we are no worse-off because the unrecovered costs would be recovered through higher developer charges, as we do consider that IPART's infrastructure contribution methodology allows us to include unrecovered revenue from customer charges in the calculation. It would also not be considered in the net operating result as it is not incremental revenue that results from new development.

In addition, we have already invested in billing system changes to enable the phase out and there would be no savings by transitioning to a complete phase-out from 1 October.

We consider we are strongly incentivised to prepare and gain registration of the Rouse Hill Stormwater DSP as our phased proposal would see **no new** land charges being applied from 1 October. This means, that if we do not have this DSP registered by this date, it will result in a direct loss of forecast revenue.

Attachment 3 provides additional feedback on pricing changes relating to Integrated Water Cycle Management (IWCM) projects, including cost allocation, the application of recycled water revenue, and additional efficiency adjustments for the Mamre Road scheme that go beyond the outcomes of IPART's recent efficiency review.

Regulatory mechanisms

Why this is important

Balancing the pressing need for additional water infrastructure with affordability for customers is a significant challenge. Regulatory mechanisms present an opportunity to soften the impact of essential spending on customer bills and to fund operational challenges which may arise over a regulatory period.

The mechanisms we have identified and propose have been chosen for their performance against IPART's principles in its *Water Regulation Handbook* (2023). IPART's revenue risk sharing framework considers these tools "*mechanisms of last resort, typically to address a material change in costs or an event which materially affects a business's ability to deliver services*" (p. 53). IPART has an expressed preference for a business recovering costs through its expenditure allowance.

IPART's two overarching principles for revenue risk sharing are (1) the long-term interests of customers in efficient investment and services and (2) efficient risk allocation to maintain an incentive for businesses to seek out efficiencies. Where there is an uncertain but identifiable and material cost that the business cannot control, IPART has indicated that a cost pass-through may be considered. However, the case should be compelling because as, IPART notes, "*cost pass-throughs generally go against* [its] *principle of providing an envelope for expenditure for businesses*". In particular, the expenditure envelope compels businesses to

reprioritise spending as circumstances change and cost pass-throughs remove that incentive. To protect this incentive, IPART applies the pass-through to the forecast rather than the actual costs.

Risks we are trying to mitigate

Our ability to recover sufficient revenue to deliver our legal obligations and invest in the services our customers value is central to a sustainable regulatory framework. In the upcoming period, we will be exposed to greater uncertainty in recovering this revenue than ever before. Key factors affecting this include water usage prices being amongst the highest our customers have ever experienced and the full re-introduction of developer charges.

All the while, we are experiencing increasing cost pressures that will continue to evolve in the years to come. As explored elsewhere in this response, tightening regulatory obligations, unprecedented growth, and increasing frequency of extreme weather events create variation in the efficient costs we require to deliver our services in the long-term interests of our customers. We aim to manage these risks in a way that maintains incentives for our business and our customers to conserve our scarce water resources.

Solutions we recommend IPART consider

We have considered IPART's Draft Determination in the context of these challenges, requesting an opportunity to work with IPART to develop sustainable solutions in regard to key sources of risk:

- **Sydney Desalination Plant:** We do not accept the draft decision to remove the existing SDP cost pass-through. The Ministerial decision framework is set in accordance with operating SDP in the long-term interests of our customers. This protocol efficiently balances the cost of time spent and severity of water restrictions with the cost of producing more desalinated water. Removing this cost pass-through would provide a disincentive for Sydney Water to efficiently balance these costs of restrictions in managing our water supply network.

  Alternatively, we request that IPART consider amending the drought trigger to 75% in line with the GSWS or as per the drought indicator dashboard underpinning the Greater Sydney Drought Response Plan. This would minimise the disincentive for Sydney Water to efficiently manage our water supply network.

- **Future bulk water price reviews:** We recognise IPART's anticipated 2027 Price Review of Sydney Desalination Plant and 2028 Price Review of WaterNSW creates further uncertainty on our efficient bulk water costs. Despite this, we are willing to accept the draft decision to true-up differences in bulk water prices resulting from these reviews in the 2030 regulatory period.

- **Shoalhaven Transfers:** We accept IPART's draft decision to maintain the Shoalhaven Transfer cost pass-through.

- **Drought:** The current drought uplift charge minimises the risk of under-recovering the funding needed to sustainably operate our business and efficiently invest in drought response actions. Additionally, it provides a stronger financial incentive for customers to reduce their water use when water is most scarce. As such, we support maintaining a drought price.

However, the 60 per cent trigger for the drought price reflects settings in the 2017 Metropolitan Water Plan which are no longer Government policy. Under the Greater Sydney Water Strategy, SDP is called into full-time operation from 75% dam levels, or earlier if certain drought indicators point to the likelihood of drought emerging. The drought price trigger should be revised in line with the GSWS, and the price level should reflect both the GSWS and other draft decisions made by IPART.

- **Growth:** Our proposed expenditure to servicing growth intends to maintain a just-in-time approach. Despite this, IPART's draft decision applies deep cuts to growth to guarantee customers do not pay for uncertainty over the outlook of development between now and 2030. While we agree in regard to our customers not paying to fund infrastructure that may not be needed in the near term, severe reductions in our allowance is contrary to the highly likely scenario where this infrastructure will be needed.

  Our preference is for IPART to source updated growth forecasts from DPHI and/or consider the impact of recent policy reforms on development in the 2025-30 period and adopt a suitable revised baseline capex allowance. In the absence of this, we consider that a regulatory mechanism during the period, and true-up in 2030, will enable us to sustainably deliver our growth servicing requirements to support our growing city.

- **Ex-post review:** As circumstances change over the course of a regulatory period, other instances may arise where Sydney Water may be required to spend above its regulatory allowance. In these cases, we request such expenditure would be subject to an ex-post review and cost recovery from customers in the 2030 regulatory period.

For more information, please refer to Attachment 6: Addressing the changing revenue needs of Sydney Water.

Financeability implications

Under the Sydney Water Act, one of our organisation's principal objectives is to operate as a successful business. It is also in the long-term interests of our customers that we remain financeable so we can continue to deliver our services efficiently and provide the outcomes our customers value. The prices determined by IPART need to be sufficient for the efficient operation of the business and ensure we can continue to provide reliable services to customers. In our context as a State Owned Corporation, it means we can meet our financial obligations and invest what is needed to deliver for customers. If we cannot do this because we are financially constrained, then customers or taxpayers will bear the cost. This may result in an inability to make the investments needed to provide the level of service that customers value today or into the future. The goal of a financeability test is to verify that revenue allowances are sufficient for an efficient business to meet its financial obligations during the upcoming regulatory period.

The relatively healthy financeability benchmark results for the IPART Draft Determination (see Tables 14 and 15) are masking the potential financeability risks that would arise if spending beyond the Draft Determination allowances is required and/or the now more volatile revenues are not achieved. The underlying financial risk has increased as a result of the increased revenue volatility, following the forecast high levels of infrastructure contributions and the increased usage element to our water and wastewater revenue charges introduced in the Draft Determination. Our updated proposal also notes the additional risk being taken and the potential need for additional expenditure beyond the allowance in the determination. The financeability tests, whilst above benchmark for most tests except for FFO/Debt in the early years, show small margins of tolerance over the minimum benchmark. This is particularly the case with the key Interest Coverage test. The potential for these two risks to eventuate and particularly in combination could materially impact our financeability situation.

The infrastructure contributions are a significant benefit in the funding of growth investments, however, the timing and size of revenues introduces development risk to our future revenues. This is particularly the case for the Aerotropolis forecast infrastructure contributions that are significant, but the Development Servicing Plan (DSP) has not yet been agreed upon. It is noted that we will spend the capital investment before the development and subsequently collect infrastructure contributions revenue. Our capital structure is more highly geared than in the past. We have moved from 33 per cent debt in 2007 to 58 per cent today and is forecast to increase above 60 per cent. This change followed NSW Treasury's 2016 Capital Structure Policy for Government Businesses. As a result, our credit rating was downgraded in December 2018 from Baa1 to Baa2 – the target rating under the capital structure policy. Our previous relatively low gearing meant we were able to absorb borrowing for projects, such as funding the desalination plant. Our headroom for more debt for such projects, without paying down outstanding debt or growing revenue base via connections, may be more limited in the future. In addition, the combination of drought and higher interest rates in the future may place unusual stress on our finances.

The combination of an uncontrollable large reduction in our water demand revenue, lower infrastructure contributions, additional expenditure needs all combined with an exceptionally low regulatory return on capital (particularly if the 3.2% cost of capital forecast in IPART's Draft Determination continues in the Final Report), could place stress on our financial metrics. IPART will need to ensure that our prices strike the right balance between affordability for our customers and the financial resilience of Sydney Water.

This section sets out our forecast financial position under our update, which assumes:

- A scenario based on IPART's Draft Determination and price path but with Sydney Water adjusted Infrastructure Contributions.
- A scenario based on Sydney Water's proposed expenditure and price path with Sydney Water adjusted infrastructure contributions.

Results under IPART's Draft Determination

Table 14 and Table 15 set out the results of IPART's actual and benchmark tests, respectively for the Draft Determination. We forecast that our FFO/Net Debt will fall below the target in both the benchmark test and the actual test. We note the Interest Coverage and FFO/Debt in the actual tests is below or only just above the minimum level.

The metrics under the IPART Draft Determination actual test appear worse than under the benchmark test because we primarily fund our business with nominal debt. We use nominal debt as the market for inflation linked instruments in Australia is thin.

Table 14: IPART actual financeability test results (1-year) based on IPART's Draft Determination

Ratio	Target	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Interest coverage (x)	**>1.8x**	1.7x	1.8x	2.0x	2.1x	2.1x	2.2x	1.9x	1.9x	1.9x	2.0x	2.0x
FFO/debt (%)	**>6%**	3.8%	4.4%	5.5%	5.8%	6.2%	6.8%	5.7%	5.5%	5.6%	6.1%	6.4%
Gearing (%)	**<70%**	56.0%	58.4%	61.0%	62.7%	63.7%	64.3%	65.8%	67.9%	69.2%	69.2%	68.7%

Table 15: IPART benchmark financeability test results (1-year) based on IPART's Draft Determination

Ratio	Target	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Interest coverage (x)	**>2.2x**	3.4x	3.6x	4.5x	4.9x	5.3x	5.7x	3.6x	3.7x	3.8x	4.0x	4.1x
FFO/debt (%)	>7%	5.6%	6.1%	8.3%	9.3%	10.2%	11.2%	9.4%	9.6%	10.0%	10.9%	11.1%
Gearing (%)	**<70%**	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%

Results under Sydney Water's updated proposal

As shown in Table 16 and Table 17 the results of the tests show marginal compliance with the benchmarks, but little margin for the potential impacts of revenue or expenditure differences that may occur during the regulatory period.

The metrics under the Sydney Water proposed expenditure and price path actual test appear worse than under the benchmark test under both scenarios because we primarily fund our business with nominal debt which is relative to the proposed capital expenditure.

Table 16: IPART actual financeability test results based (1-year) on Sydney Water's updated proposal

Ratio	Target	2024-25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Interest coverage (x)	**>1.8x**	1.7x	1.9x	2.1x	2.1x	2.0x	2.1x	2.0x	2.0x	2.0x	2.1x	2.2x
FFO/debt (%)	**>6%**	3.8%	4.7%	5.9%	6.1%	6.3%	6.6%	6.2%	6.1%	6.3%	6.9%	7.3%
Gearing (%)	**<70%**	55.9%	58.1%	60.5%	62.1%	63.1%	64.0%	65.2%	66.7%	67.4%	67.3%	66.3%

Table 17: IPART benchmark financeability test results (1-year) based on Sydney Water's updated proposal

Ratio	Target	2024-25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35
Interest coverage (x)	**>2.2x**	3.4x	3.8x	4.8x	5.1x	5.5x	5.9x	3.7x	3.8x	4.0x	4.2x	4.3x
FFO/debt (%)	**>7%**	5.6%	6.7%	9.0%	9.8%	10.6%	11.7%	9.8%	10.1%	10.5%	11.5%	11.9%
Gearing (%)	**<70%**	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%

Performance

IPART has accepted the performance outcomes and objectives proposed by Sydney Water and suggested several additional measures and asked Sydney Water to consider if there are better ways to track performance in some areas. Sydney Water is open to reporting additional measures and improving some measures, where they are practicable to measure, easy for customers to understand and add meaningful insights. IPART asked us to set out targets for new measures. Sydney Water notes that there are some areas where it might not be appropriate to set targets, such as payment assistance. Many of the targets put forward in the Price Proposal are at risk from reduced investment and may need review based on the final expenditure outcome.

We discuss these changes to measures and targets in detail in Attachment 5 and provide a summary table below. Potential additional supplementary performance indicators are outlined in Attachment 5.

Table 18: Proposed changes (in red) to our performance measures, targets and trends

Outcome objectives	Performance measures	Target and trend	Comments on our response to IPART
Fair and affordable bills	**Affordability:** average residential customer bill as a percentage of average disposable income for the Greater Sydney region	Target ≤1.24% by 2030. Trend: Maintain (benchmark range)	We will update the target post final determination to reflect the final price path.
Positive customer experience	**Customer satisfaction:** position compared to benchmarked peers in an external survey of overall customer satisfaction (as measured by quarterly Brand Tracker Customer Survey customer rating, including consumers such as tenants, for overall service satisfaction of 8 or more out of 10)	Target: top quartile Trend: Maintain (benchmark range)	We have modified the measure description to clarify that consumers are included.
Informed and empowered customers	**Water literacy**: score (out of 10) from an external survey testing customers' understanding of water, where it comes from, how it is managed, and where it goes	Target: ≥ 5.75 out of 10 by 2030 Trend: Improve	We will update the target post final determination to reflect the final price path.
Safe swimming and recreation	**Public access and recreation**: annual increase in number of sites where our actions have improved community access and amenity for recreation (including safe swimming and land-based recreation)	Target: ≥ 7 extra sites by 2030 Trend: Maintain	We have modified the description of measure to clarify Sydney Water's performance. We have revised the target to correct an error and will update this post final determination if needed.
Safe and clean water	**Drinking water quality:** percentage of drinking water samples meeting health-based guidelines	Target ≥99.9% each year Trend: Maintain	We have amended the calculation methodology to more realistically measure our performance. We will target maintaining performance and will update it post final determination if needed.
Secure water supply	**Available water supply:** percentage of drinking water demand that can be met by rainfall-independent supply	Target ≥16% by 2030. Trend: Maintain risk level	We have lowered the target and trend due to SDPE deferral by government.
Saving water together	**Drinking water use:** residential drinking water use per person per day	Target <179 LPD by 2030 Trend: Improve	We have revised the target and trend and will update it post final determination if needed.
	System leakage: percentage of drinking water supplied lost as leakage	Target ≤7% by 2030 Trend: Improve	We will update the target post final determination if needed.
Reliable water	**Water continuity**: percentage of customers affected by an unplanned water interruption for more than five hours	Target < 2% each year Trend: Maintain	We will update the target post final determination if needed.
Prevent pollution	**Quality of treated wastewater**: total number of non-compliances on amount (load) and concentration of	Target: ≤ 9 by 2030 Trend: Progress to restore	We have amended the calculation methodology to more realistically measure our effluent discharge

Outcome objectives	Performance measures	Target and trend	Comments on our response to IPART
	wastewater pollutants and bypass from water resource recovery facilities.		compliance beyond just core pollutants. We will target progress to restore compliance and update the target post final determination if needed.
	Pollution and environmental harm incidents: number of pollution incidents or other incidents that cause, or could cause, environmental harm. The types of different incidents will be reported on (mainly wastewater treatment and network incidents, also water and recycled water network, stormwater and other).	Target: ≤ 1053 Trend: Maintain (recent average weather performance)	We have modified the measure description to add that we will report different types of pollution and environmental harm incidents.
Recover resources	**Volume of recycled water available:** volume of our recycled water that is available for supply, including from treated wastewater and harvested stormwater (gigalitres (GL)/year).	Target: ≥ 62 GL/yr by 2030 Trend: Restore then improve	We have revised the trend to clarify this is restoring previous performance and will update the target post final determination if needed.
Cool, green, natural places	**Natural area and green infrastructure land actively managed**: percentage of Sydney Water land area with natural values and green infrastructure that is actively managed to maintain or improve its natural values and functions.	Target: ≥ 78% by 2030 Trend: Improve	We have modified the measure description to clarify what is meant by 'actively managed'.
Net zero carbon emissions	**Net zero carbon emissions:** volume of carbon emissions by scope 1 and scope 2 and net emissions (CO2-e tonnes per year, where CO2-e refers to 'carbon dioxide equivalent').	Target: Achieve net zero carbon emissions by 2030. Trend: Improve	We have modified the measure description to clarify that we will report separate values for scope 1 and 2 emissions.
Climate resilient systems	**Climate risk maturity health check:** Enterprise-scale level of climate risk management maturity rated through the NSW Climate Risk Maturity Health Check Tool	Target: Achieve advanced rating by 2030 Trend: Improve	No changes

Incentive mechanisms

IPART has made the draft decision to accept Sydney Water's financial incentives proposal without our proposed exemptions. While in principle we believe regulated utilities should be incentivised to deliver efficiencies, we consider the EBSS and CESS mechanisms should not be applied to in the 2025-30 regulatory period. We have reached this decision as:

- The expenditure reductions proposed by IPART and their material impacts on performance glidepaths such as the leakage (which is now subject to a financial penalty) and pollution targets;
- The disallowance of essential and unavoidable works that must be undertaken to comply with our environmental licences and obligations under the Sydney Water Act; and
- Sydney Water may need to conduct the excluded capital programs.

Simply put, having a high likelihood Sydney Water may incur the entire 1% penalty before commencing the regulatory period is not acceptable. Given that these incentives are not a requirement for utilities which are graded standard and the certain risk it introduces, we believe implementation of financial incentives in these circumstances would distort the signals IPART wishes to send as on the margin, these signals would be ameliorated by Sydney Water hitting the 1% cap by undertaking essential compliance works above IPARTs draft determination.

Attachments

Attachment 1: Operating expenditure

Attachment 2: Infrastructure capital investment

Attachment 3: Revenue requirement

Attachment 4: Prices and Bill Impacts

Attachment 5: Performance and Accountability

Attachment 6: Addressing the changing revenue needs of Sydney Water

Attachment 7: Hawkesbury City Council Wastewater Assets

Sydney Water's response to IPART's Draft Determination and Report

Attachments 1 to 7

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Contents

The following seven attachments provide further detail on our response to IPART's Draft Determination and Report, including further insight and supporting evidence on Sydney Water's positions and justifications.

Attachment 1: Operating Expenditure

This attachment provides further detail on our response to IPART's Draft Determination and Report (DDR), with a focus on operating expenditure.

It presents additional information for IPART's consideration in making its final decision, including more detailed bottom-up cost information, a discussion of established regulatory precedent in other jurisdictions regarding the top-down BTS approach and our concerns with the impacts and level of risk introduced by IPART's draft decisions for operating expenditure for customers and other stakeholders.

We have structured this attachment to follow the order of draft decisions in IPART's DDR, as below:

- **Section 1.1** provides an introduction, with an overview of our *Price Proposal*, IPART's draft decisions and our main concerns,
- **Section 1.2** covers base operating expenditure,
- **Section 1.3** covers trend operating expenditure,
- **Section 1.4** covers step changes in operating expenditure,
- **Section 1.5** covers bulk water costs, and
- **Section 1.6** covers operating expenditure for the 2024-25 deferral year.

1.1 Introduction

Our operating expenditure covers the day-to-day operating, maintenance and administrative costs that we incur in delivering our services. It includes the costs of labour, materials, contractors and energy, as well as expenditure associated with privately owned and operated water filtration plants under build-own-operate (BOO) arrangements and from purchasing bulk water from WaterNSW (WNSW) and Sydney Desalination Plant (SDP).

Our *Price Proposal* for 2025-30 forecast that we would need to spend $9.9 billion in operating expenditure to:

- support rising bulk water costs,
- service new growth,
- protect asset and service performance for customers through increased investment in maintenance,
- ensure a safe and secure water supply, and
- enhance our digital security and capabilities.

IPART's draft decision is to allow $8.9 billion of operating expenditure for the 2025-30 period, a $1.0 billion or 10% reduction compared to our proposal.

Just over half of the reduction, or around $516 million, reflects IPART's draft decisions in their review of WNSW Greater Sydney prices to essentially roll-over current regulated prices with relatively minor adjustments for inflation and essential dam safety works. If this information had been available at the time of submitting our *Price Proposal* in September 2024, our proposed operating expenditure allowance would have been lower by an equivalent amount.

The remainder of IPART's draft decision relates to our core operating expenditure, with a reduction of $438 million or 6% compared with our proposal, comprised of the following adjustments:

- $2 million a year reduction in proposed baseline expenditure of $1,196 million a year, equal to $10 million over 2025-30,
- $234 million or 80% reduction to our proposed trend expenditure of $296 million, and
- $189 million or about a 50% reduction to our proposed step expenditure of $384 million.[1]

We welcome IPART's draft decision to update bulk water costs and to accept many aspects of our *Price Proposal*. In particular, we are pleased that IPART has accepted our proposed compounding annual efficiency factor of 0.7% a year, which IPART considered was consistent with information they obtained on multi-factor productivity (MFP) estimates across 16 industries. The assumed efficiency factor, in addition to our one-off, business-wide efficiency stretch target, will provide a strong incentive for us to carefully manage our costs, reducing the pressure on customer bills while still delivering safe and reliable services.

1 IPART's Draft Report only provides a gross step of $431.6 million over 2025-30, without including its adjustment to our proposed step efficiency. Based on available numbers in IPART's DDR and our reconciliation, we have estimated IPART's draft decision regarding net step changes, including an adjusted step efficiency, as $194 million over 2025-30.

We propose some adjustments to IPART's draft decisions

IPART has made a number of draft decisions to reduce our trend expenditure, which we proposed to recover our growth-related costs and changes in input prices, and to decrease our water, wastewater and stormwater maintenance step changes, which we proposed to ensure the resilience of our systems and improve our performance.

We have strong concerns that IPART's draft decision for trend expenditure does not provide sufficient funding to cover the cost of new plants, chemicals, biosolids, BOO, energy and maintenance costs to service the growth in our customer base. Nor the price changes for inputs like energy, chemicals and BOO costs. In particular, we believe that IPART has not sufficiently engaged with our bottom-up forecast of these costs, and has applied a top-down approach, which significantly departs from its own decisions in Hunter Water's Final Determination and Report,[2] and established regulatory precedents set in other jurisdictions. We are also concerned with IPART's draft decisions on additional maintenance, which we consider will severely constrain our ability to continue providing the level of service our customers have come to expect, and represent a material risk that we will be not be able to comply with regulatory requirements.

This is the first time a Base-Trend-Step (BTS) methodology has been used to develop our proposed operating expenditure. In preparing our forecast, we carefully considered IPART's *Water Regulation Handbook*[3], engaged external advice, and undertook a review of regulatory precedents in other jurisdictions such as the Victorian PREMO model and the Australian energy sector.

Looking forward, we would welcome more detailed guidance and engagement with IPART on the application of the BTS approach to forecast opex, including definitions and examples of different BTS cost categories (eg controllable and non-controllable expenditure or core and non-core expenditure) and accepted methodologies and assumptions regarding baseline, trend and step expenditure (eg baseline adjustments, measures of output growth, and the application of real input price escalation factors to all or proportions of the controllable baseline expenditure). This will ensure greater consistency of application of the BTS approach across the NSW water sector and promote best practice for future price determinations. Supported by the learnings and experience further gained in this price review process, we consider that this will enable us to continue to improve how we apply a BTS approach to our forecast opex in future.

Table A.1.1 summarises IPART's draft decisions for operating expenditure and our position. The following sections explain our rationale for the items we oppose.

2 IPART (2025) Review of Prices for Hunter Water Corporation from 1 July 2025.
3 IPART (2023) Water regulation Handbook

Table A.1.1 Our revised operating expenditure over 2025-30 ($24-25 millions)

Operating expenditure	Our Price Proposal	IPART Draft Decision	Our revised position	Explanation
Base	$5,980	$5,970	$5,980	We do not accept IPART's draft decision and wish to provide additional information for IPART's consideration on our baseline energy and water conservation costs.
Trend	$296	$59	$296	We do not accept IPART's draft decision. We have validated the proposed trend expenditure with a bottom-up costings, which supports our approach.
Step (including step efficiency)	$383	$194*	$325	We accept many of IPART's draft decisions regarding step changes, including Hawkesbury Nepean Nutrient Management Framework (HNNMF) activities, property costs and IT propex. However, we do not accept IPART's draft decisions and seek full re-instatement of our proposed step changes for: • Uplift in water and wastewater maintenance, • Additional stormwater remediation and desilting, • Pre-treatment, • Digital metering, and • Digitalisation. Please see Section 1.4 for more details.
Other non-controllable costs (excluding bulk water)	$295	$295	$295	-
Total core operating expenditure	$6,956	$6,518	$6,896	-
WNSW bulk water costs	$1,717	$1,226	$1,226	We accept IPART's Draft Decision to update our WNSW bulk water costs, in line with its WNSW Draft Determination and Report for Greater Sydney prices.
SDP bulk water costs	$1204	$1,178	$1,178	We accept IPART's Draft Decision, however request that a baseline allowance is made for our additional SDP costs associated with critical maintenance.
Total bulk water costs	$2,921	$2,406	$2,406	-
Total regulatory operating expenditure	$9,877	$8,924	$9,302	-

*Note: IPART's DDR only provides a gross step of $431.6 million over 2025-30, without including its adjustment to our proposed step efficiency. Based on available numbers in IPART's DDR and our reconciliation, we have estimated IPART's draft decision regarding net step changes, including an adjusted step efficiency, as $194 million over 2025-30.

1.2 Base operating expenditure

Our *Price Proposal* set out a baseline opex of $1,196 million p.a. over the next 5 years, which we considered reflected the ongoing, efficient level of costs needed to provide our water, wastewater, and stormwater services in a stable operating environment. This was based on our actual controllable operating expenditure of $1,204 million for the 2023–24 base year, with a net $7 million downward adjustment to deduct for extraordinary items incurred during the year and add on normally occurring items that were not incurred.

IPART has made a draft decision to set our baseline expenditure at $1,194 million p.a. to reflect its view of our efficient baseline allowance. This includes an additional $2 million p.a. downward adjustment to our proposed baseline opex to account for what IPART considers to be higher-than-expected energy and water conservation costs for a typical year. IPART's baseline adjustments effectively adopt AtkinsRéalis' upper bound recommendation.

We continue to consider that our proposed baseline opex of $1,196 million p.a., which already includes a range of adjustments to account for non-recurrent items and expected cost savings, reflects our efficient costs in a typical year, as supported by benchmarking analysis submitted in our *Price Proposal*.[4] This includes our baseline energy and water conservation costs.

We provide additional information below on both these costs for IPART's consideration as to why we believe IPART's further reductions to our proposed baseline opex are not necessary.

1.2.1 General approach

As set out in IPART's *Water Regulation Handbook*[5] baseline opex should reflect a business' current, efficient level of recurrent controllable opex. IPART applies a 'revealed costs' approach, where baseline opex is derived by using actual opex in the second last year of the current determination period, including only controllable and recurring costs, and then applying additional adjustments to normalise expenditure in the base year to ensure it reflects efficient costs incurred in a 'typical year'.

We support this approach and welcome IPART's decision to allow baseline adjustments for labour vacancies, where unfilled vacancies are above a business' established long-term average vacancy rate. This was our own experience in the 2023-24 base year, when our labour vacancies were relatively high and our labour costs were lower-than-expected following the COVID-19 pandemic. We observe that justifications to not apply labour vacancy reductions due to a 'tight job market' would appear to be contrary to the purpose of baseline adjustments, which is to ensure costs reflect a 'typical year' and 'average' operating conditions – including an 'average' job market.

In general, we would appreciate additional guidance from IPART on accepted approaches to baseline opex and adjustments. Through our own experience of applying BTS for the first time, we have reflected that it can be difficult determining what are appropriate adjustments to normalise actual expenditure in a base year, so that it reflects a 'typical year' and an 'average' operating environment. To this end, we believe that additional guidance, such as a non-exhaustive list of appropriate categories and justifications for baseline adjustments, would be a valuable starting point for utilities applying BTS to forecast opex in future. We would welcome additional engagement and working together with IPART on developing any such guidance.

Finally, we note that there can be material variations in opex in the last year of the current determination period, which can be difficult to account for and 'lost' when using the second last year as the base year. We saw, for example, our energy costs increase by more than 33% from $60 million in the 2023-24 base year to $80 million in 2024-25, driven by significant retail / wholesale rate increases of up to 60% and regulated network rates increases of 20%. The new energy rates will essentially become part of our base annual costs over the 2025-30 regulatory period. We would welcome further engagement with IPART on the appropriate treatment of these variations in future determinations.

4 Sydney Water (2024) Price Proposal 2025-30.
5 IPART (2023) Water regulation Handbook.

1.2.2 Base energy costs

In our *Price Proposal*, we put forward $60 million in baseline energy costs, which were our actual energy costs incurred in the 2023-24 base year. This reflected our net costs of purchasing 388 GWh energy from the grid, after accounting for 59 GWh of self-generation through our hydro, solar and co-generation assets.

IPART has applied a $1 million a year downward adjustment to these costs to account for the fact that some of our renewable energy sources were offline, leading to greater energy costs in the 2023-24 base year. We believe this downward adjustment is double counting, as the forward electricity budgets in our *Price Proposal* already use a higher renewable energy forecast than the baseline year. A further adjustment, as proposed, is therefore unnecessary.

We understand IPART's reasoning that as some of our renewable energy assets have been offline, this would have necessarily resulted in higher-than-expected grid purchases in 2023-24. As explained in our efficiency review process with AtkinsRéalis, this was due to a combination of challenges at Prospect Hydro, Malabar Water Resource Recovery Facility and St Mary Advanced Water Treatment Plant (ATWP), some of which was out of our control. We note for example that we had very limited opportunities to run the generator at Prospect Hydro, without breaching the operating envelope and impacting water quality and reliability throughout 2023-24. Prospect Hydro is a particularly complex asset, where the operating envelope is impacted by pipeline configurations, dam height and actual pipeline flows. This operating envelope is set to manage possible risks to avoid any upstream pipeline damage and downstream flow surges at Prospect Water Filtration Plant. As such, we chose to prioritise water quality and reliability over generator operation.

Regardless, we wish to clarify that in developing our forecast energy costs for our *Price Proposal*:

- We have assumed we will return to having these renewable energy assets back online,
- We will be generating and consuming 73 GWh p.a. of renewable energy, which is 14 GWh higher than the 59 GWh of self-generation consumed in our 2023-24 base year and, indeed, higher than our long-term average of 69 GWh over the last 10 years, and
- We have already accounted for the increase in renewable self-generation and an equivalent reduction in our total energy costs / grid purchases over the next five years.

This is set out in Table A.1.2 below. We note that while we have accounted for higher levels of renewable self-generation and consumption, our forecast total energy costs will remain higher than our baseline in 2023-24, even after accounting for energy efficiencies. This is due to greater volumes of energy being required to support growth and the operation of new assets and changes in prices. In the context of IPART's BTS framework, we have submitted our forecast total energy costs / grid purchases as part of our proposed baseline and trend expenditure. This is because all our additional energy costs above our proposed baseline are driven by growth (ie new assets, network growth) and changes in prices.

Table A.1.2 Our forecast electricity usage (GWh) and energy costs over 2025-30 ($24-25 millions)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Total electricity usage (GWh)	439	447	454	488	494	507	519
Total renewable self-generation consumed (GWh)	59	62	73	73	73	73	73
Total grid power purchased (GWh)	388	385	381	415	421	434	445
Total energy costs/grid purchases ($24-25 millions)	$60	$80	$80	$89	$87	$82	$92

1.2.3 Base water conservation costs

Our *Price Proposal* also included a baseline operating expenditure of $50 million over the next five years for our water conservation program to deliver ongoing activities around water efficiency, program governance and innovation. This baseline expenditure was intended to deliver our 5-year water conservation plan, implement water efficiency activities meeting the current economic method, and provide regular reporting, as required by our *Operating Licence 2024-2028*.

We also planned to support the implementation of the Greater Sydney Water Strategy (GSWS) and our Long-Term Capital and Operational Plan through this baseline expenditure, by making our drinking water supply go further. In particular, the GSWS includes water efficiency targets for Sydney Water to achieve 38 gigalitres (GL) per year of drinking water savings by 2030, increasing to 49 GL per year by 2040. These targets in the GSWS are critical for delaying the need for large scale investment in new water supply sources, thereby reducing long-term costs for customers.

IPART has made a draft decision to apply a downward adjustment of $1 million per year to our baseline water conservation expenditure, based on a finding by AtkinsRéalis that "project management formed 35% of the costs" and that Sydney Water could achieve efficiencies in program delivery and management. We wish to clarify that this figure is factually incorrect and that project management accounts for only 6% of total program costs.

- The remaining portion of the cited 35% includes:
    - Labour costs for our field team of five full-time employees (FTEs), who are responsible for the delivery of our water efficiency programs, educating customers and industry on water theft and backflow prevention and additionally, assessing and processing exemption requests, patrolling and investigating breaches of water restrictions during periods of drought,
    - Resources directly delivering water conservation programs (eg WaterFix Residential, WaterFix Concealed Leaks), and
    - Dedicated research and innovation roles and temporary support for network leakage improvement initiatives.

We consider these to all be business-as-usual activities, which are necessary to the delivery of our water conservation program and maintaining a baseline drought response capability.

In making its final decision, we additionally ask that IPART consider that we will be required to provide $24 million in contributions to the NSW Government Climate Change Fund (CCF) over the next five years.[6] Due to timing, we were not able to include these contributions in our forecast operating expenditure for our *Price Proposal*.

More broadly, IPART has also made other draft decisions to disallow our digital metering program and our proposed uplift in reactive maintenance to address breaks and leaks. Together with IPART's draft decision to reduce our baseline water conservation expenditure, IPART's reductions to digital metering and reactive maintenance will significantly constrain our ability to deliver the key pillars of our water conservation plan over the next five years. We therefore ask IPART to carefully consider the cumulative impacts of its decisions and request that IPART re-instate our proposed baseline water conservation expenditure of $50 million, without any adjustment, over 2025-30.

6 We are required to provide CCF contributions to NSW Government of $3.55 million in 2024-25, $5.625 million in 2025-26, $5.425 million in 2026-27, $5.075 million in 2027-28 and $4.325 million in 2028-29. This will total $24 million over 2025-30.

1.3 Trend operating expenditure

In addition to our proposed baseline opex, we also sought trend expenditure of between $25 to $96 million each year or $296 million in total over 2025-30 in our *Price Proposal*. In determining these costs, we applied two approaches:

1. Using a robust bottom-up budget estimation process, which forms the basis of our Statement of Corporate Intent (SCI) submitted to NSW Treasury each year, and
2. Applying a top-down trend expenditure methodology as required by IPART's *Water Regulation Handbook*, [7] supplemented by our understanding of best regulatory practice in other jurisdictions.

We cross-validated the cost estimates from these two approaches to further ensure that our business could deliver the outputs of the top-down forecast at a business group-level.

IPART has made a draft decision to set our trend expenditure between $2 million to $24 million each year or $59 million in total over 2025-30. This represents an almost 80% reduction to our proposed trend expenditure, as shown in Figure A.1.1 IPART's draft decision is based on changes to assumptions in its top-down methodology, including:

- a reduction to our proposed growth factor across all services, which is AtkinsRéalis upper recommendation, and
- the partial application of real price input changes to a portion of our baseline opex, which is a close mid-point between AtkinsRéalis upper and lower recommendations.

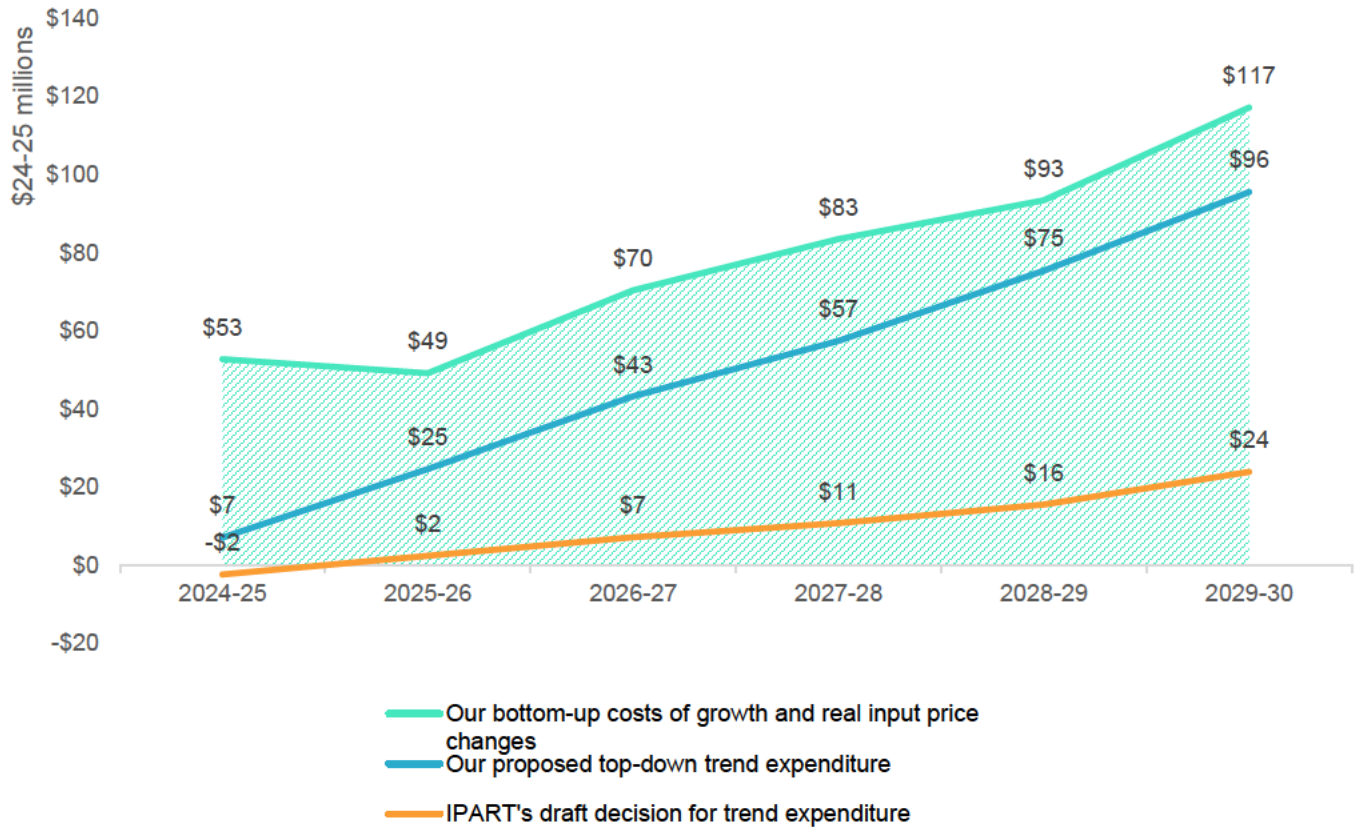
We disagree with IPART's draft decision to reduce our proposed trend opex allowance and consider that our proposed trend opex of $296 million over 2025-30 represents a prudent and efficient level of expenditure to recover our growth-related costs and changes in input prices subject to our commitment to achieving an annual efficiency factor.

We have concerns that IPART's top-down approach, based on AtkinsRéalis' findings:

- has not sufficiently engaged with our bottom-up forecast, which shows that our proposed top-down trend expenditure forecast is very reasonable and already results in a significant reduction to our bottom-up costs,
- significantly departs from IPART's recent decisions in Hunter Water's Final Determination and Report,[8] and established regulatory precedent set in other jurisdictions (Essential Services Commission Victoria (ESC Victoria) decisions for Victoria water utilities, Essential Services Commission of South Australia (ESCOSA) for South Australia (SA) Water and Australian Energy Regulator (AER) for the Australian energy sector), and
- imposes an unacceptable level of risk on the servicing of growth areas to the detriment of new customers and other stakeholders.

7 IPART (2023) Water regulation Handbook.
8 IPART (2025) Final Report - Review of Prices for Hunter Water Corporation from 1 July 2025.

Figure A.1.1 Our bottom-up forecast and proposed trend expenditure, relative to IPART's Draft Decision for trend expenditure ($24-25 millions)



1.3.1 Our bottom-up costs

Across jurisdictions, different regulators have applied a mix of top-down and bottom-up approaches when determining trend expenditure. Some regulators have applied an exclusively top-down approach, based on a formula and assumptions around growth, real input price escalation and efficiency factors. This is common in the Victorian water sector, for example, where ESC Victoria has applied a top-down 'rate of change' approach since the introduction of the Performance, Risk, Engagement, Management and Outcomes (PREMO) framework in 2016. Other regulators have applied a hybrid approach and verified the outputs of a top-down approach with an assessment of bottom-up growth-related and input costs, based on business planning expertise and analysis. This approach has been applied by the AER in the Australian energy sector.[9] In South Australia, ESCOSA recently applied this approach for SA Water.[10]

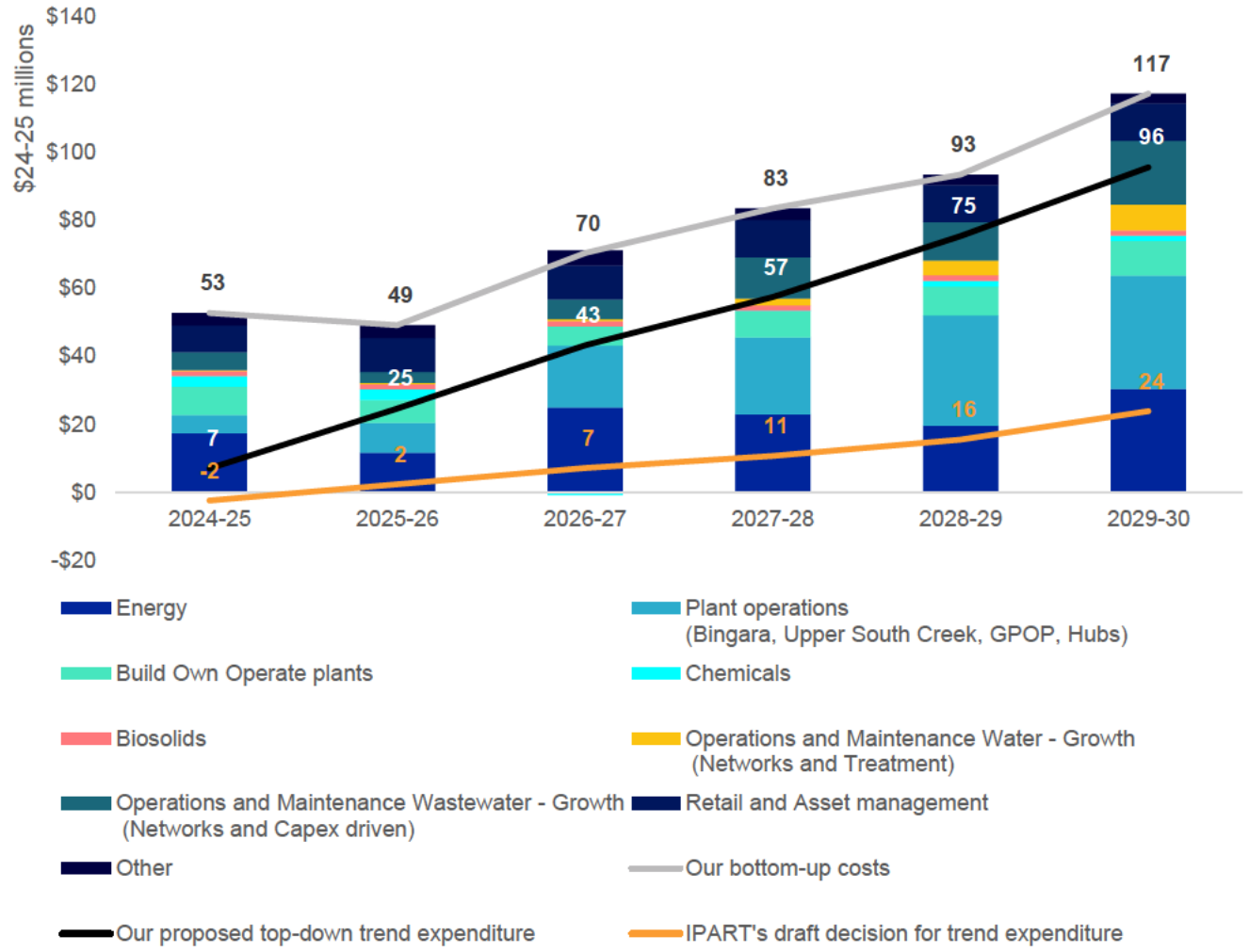
As it was our first time applying IPART's BTS methodology under the new 3Cs framework, we also developed a bottom-up forecast of all our growth-related opex, above- and below-CPI input cost changes and expected efficiencies to cross-validate the top-down trend expenditure forecast. This was also done to ensure our business could deliver the outputs of the top-down forecast at a business group-level.

Our bottom-up forecast showed that we required between $49 million to $117 million each year or $413 million in total over 2025-30 to cover all growth-related opex and real input price changes. Our bottom-up forecast exceeded our top-down trend expenditure forecast derived using IPART's methodology by more than $100 million. Nevertheless, we proposed a top-down trend forecast of $296 million and challenged ourselves to meet this top-down forecast through a range of initiatives to deliver our proposed efficiency targets, which includes our compounding trend efficiency factor of 0.7% p.a. or $179 million over the next five years, including Digital Customer Platform, People Experience Platform (PxP) and FLOW program.

Over the next five years, we have plans to deliver major projects in Upper South Creek (new facility), Greater Parramatta and Olympic Peninsula (GPOP) (new facility), upgrades to Bingara Gorge Water Resource Recovery Facility for growth and compliance (a recently acquired facility) and servicing of major growth precincts in North West and South West Sydney. Approximately 140 kilometres of greenfield trunk mains and associated pumping stations will also come into service in Western Sydney over the next five years. Our bottom-up costs included increased BOO costs, higher energy, biosolids and chemical costs to treat and move greater volumes of water and wastewater, operational costs to support these major projects in Upper South Creek, Greater Parramatta and Olympic Peninsula (GPOP), and Bingara Gorge, and growth hubs in areas such as North Head, Blue Mountains and Malabar and a modest amount of additional full-time employees (FTEs) for additional customer support and billing. This is shown in Figure A.1.2.

9 AER (2017) Issues Paper - Remitted decisions for NSW/ACT 2014–19 electricity distribution determinations Operating Expenditure, p. 21
10 ESCOSA (2024) SA Water Regulatory Determination 2024 - Final Determination: Statement of Reasons, pp. 232-4

Figure A.1.2 Our detailed bottom-up costs of growth and real input price changes over 2025-30 ($24-25 millions)



IPART's draft decision to allow just $59 million for these growth-related costs and input cost changes places our ability to service growth in these areas at significant risk. For context, the impact of IPART's draft decision for trend expenditure is that we would not be able to recover the additional increase in just our forecast energy costs (ie. arising from forecast growth and market price changes), every year – for the next five years, by between $4 to $18 million.

Alternatively, IPART's trend allowance would only cover 60% of just our operational costs to support major growth projects (Upper South Creek, Bingara Gorge, Sydney Olympic Park Authority (SOPA), GPOP), which alone amount to $99 million over next 5 years. This does not even yet account for the additional energy, chemical and biosolids costs, Build-Own-Operate (BOO) costs, maintenance and customer support and billing costs to service the growth in our customer base.

Without our proposed trend expenditure, customers are likely to experience a longer response time when they call Sydney Water for help, or when our crews need to fix a fault in our assets. Customers – new and existing – may be experience service longer interruptions, or experience other inconveniences such as increased traffic congestion while we repair faults. This is explored further in the following case study on our Customer Experience team and its management of customer growth to date.

We would be happy to provide this detailed bottom-up cost information to IPART and to engage further with IPART at any time on our budgeting approach and the processes by which we have developed these cost estimates.

Figure A.1.3 Case study on our Customer Experience team and the management of growth to date

Managing growth with our Customer Experience team

Our Customer Experience team (previously Customer Service) plays an important role in ensuring that every one of our customers – existing and new – receives a positive customer experience that is fair, inclusive and helpful. The team, which is currently made up of 108 full-time employees (FTEs), is responsible for providing customer services to more than 5.4 million people across Greater Sydney.

Our Customer Experience team:

- Creates and maintains customer accounts, for 2.1 million properties,
- Manages 8.4 million bills each year responsible for the invoicing process and ensuring the accuracy of bills,
- Offers bill payment assistance and support to customers in need, and provides personal service to our vulnerable customers,
- Receives and resolves customer enquiries through our Customer Interaction Centre and Customer Hub,
- Co-ordinates network operations and maintenance activities to minimise or avoid customer impact,
- Communicates, responds and provides case management for customers, if they are impacted by service faults or interruptions through our Customer Hub,
- Monitors and controls critical assets across our area of operations,
- Monitors our IoT network, and
- Manages customer complaints.

As one of the fastest-growing cities in Australia, Greater Sydney is set to reach a population of 8 million people over the next 40 years. Over the past decade, we have already seen a significant growth in our customer base, with more than 200,000 connections serving almost 1 million more people.

Throughout that time, our Customer Experience team has not grown, but has had to manage:

- **Greater total call hours**: Call volumes have reduced in volume by 13% with the introduction of our MyAccount portal, but average handling time (AHT) across all general enquiries, faults and care have increased. This has resulted in total call hours for our team more than doubling from 2.4 million call hours (2012-13) to 5.7 million call hours (2023-24).
- **Increasing case volumes**: New property case volumes have tripled to 10,500 since 2020, significantly increasing workloads in account maintenance, payments and revenue collections.
- **Rising third-party claims.**

These pressures, from a fast-growing customer base, has resulted in greater sick leave and staff attrition reaching an all-time high in our Customer Experience team.

Over the next five years, this trend in customer growth is only expected to continue, with our Customer Experience team set to support more than 100,000 new residential and non-residential customers. At the same time, customer hardship is growing, which will require our Customer Experience team to not only provide call support but also deliver education and outreach. Another key priority for the team is to improve our relationship with tenants, in line with regulatory and community expectations. Furthermore, customer expectations are increasing, with a vast majority of assets being 'run to fail' resulting in significant increases in customer complaints and claims.

For our Customer Hub, having new infrastructure in place to service growth will further increase the monitoring of critical infrastructure. The added challenges of aging assets and climate change will further increase the risk of our customers being impacted by service interruptions, including water main breaks and aging pressure reduction valves. This is likely to increase the number of customer-reported incidents and service requests.

In line with this expected customer growth, we have forecast a modest increase in full-time employees (FTEs) to provide customer support and billing for new customers in our bottom-up cost estimates and for the first time in more than a decade included this funding in our *Price Proposal* as part of our proposed trend expenditure. While the increased workload from customer growth has been absorbed by our Customer Experience team to date, this cannot be sustained into the future. This funding will critically ensure that our Customer Experience team remains able to provide all of our customers – existing and new - with a positive customer experience that is fair, inclusive and helpful.

1.3.2 Output growth

IPART has made a draft decision to reduce our proposed output growth factor, based on forecast customer connections:

- For water, stormwater and corporate services from 1.4% to 0.7%, and
- For wastewater services from 1.4% to 1% on average over 2025-30.

This is in line with AtkinsRéalis' upper bound recommendation.

We believe that this reduction does not adequately consider the complexity, scale and growth expected of our servicing area and significantly departs from IPART's own decision in Hunter Water's Final Determination and Report,[11] and established regulatory precedent in other jurisdictions.

We service one of Australia's largest growing metropolitan regions, with high concentrations of urban development and infrastructure expansion. The geographic spread of growth we face, particularly into currently unserviced greenfield growth areas, such as the South West Growth Area (SWGA) and the Greater Macarthur Growth Area, is set to increase dramatically, with the coverage of growth areas forecast to increase by 20% by 2035. In terms of land area, this is the equivalent of a new city the size of Canberra within our area of operations. This compares to the experience of other water utilities across Australia, who tend to operate within smaller areas of operation and service a smaller number of customers.

We also consider that IPART's reduction also significantly departs from IPART's own decision in Hunter Water's Final Determination and Report,[12] and established regulatory precedent in other jurisdictions. From our review of other jurisdictions as shown in Table A.1.3 below, we have found that our proposed measure of forecast customer connections, in line with demand projections, is common practice. This measure has been accepted by water utility regulators across Victoria, South Australia and Tasmania – without any adjustment and regardless of proposal rating.

Most recently, IPART itself accepted Hunter Water's proposed output growth measure of forecast customer connections of 1.3%, without any adjustment, in Hunter Water's Final Determination and Report released in June 2025.[13] Despite this, IPART has applied a reduction of between 30% to 50% to our proposed growth factor across different services. While we recognise that Hunter Water has received an 'Advanced' proposal rating under IPART's 3Cs framework, we do not consider that a different proposal rating should warrant IPART applying the common principles and assumptions of a BTS approach differently from utility to utility. This is particularly relevant for output growth measures, where regulatory precedent across the Victorian water and Australian energy sectors to date has strongly supported a relatively standardised approach of using forecast customer connections or a weighted average of customer numbers, circuit line length and ratcheted maximum demand respectively. In departing from established regulatory precedent, IPART's draft decision results in us being among the lowest awarded nationally when compared to other water utilities. We strongly believe our growth rate has been conservatively estimated.

Finally, we note that other measures, such as 'volume of water supplied', do not provide a sufficiently reliable indicator of the impact on costs of growth in water services. In particular, there can be a 'downward' bias when using 'volume of water supplied' relative to other measures of trend output growth, such as 'customer connections' or 'length of mains' measures. This is relevant as we have water efficiency objectives and targets relating to customer demand and leakage.

11 IPART (2025), Hunter Water Prices 2025-2030 Final Report.
12 Ibid.
13 Ibid., p. 38.

Table A.1.3 Output growth rates awarded to Australian water and energy utilities in final regulatory decisions

Jurisdiction	Utility	Measure of output growth applied	Output Growth Rate	Proposal Rating	Year
Water					
NSW	Sydney Water (IPART DDR)	• 50% reduction in forecast growth in water, stormwater and corporate connections • 30% reduction in forecast growth in water, stormwater and corporate connections	• 0.7% • 1.0%	Standard	2025
	Hunter Water	Forecast growth in dwellings	1.3%	Advanced	2025
Vic	Barwon Water	Victorian Government Population and Dwelling Growth Estimates	2.1%	Advanced	2023
	Central Highlands	Victorian Government Population and Dwelling Growth Estimates	2.2%	Standard	2023
	Coliban Water	Forecast growth in residential dwelling and long-term connection average	1.9%	Standard	2023
	Gippsland Water	Victorian Government Population and Dwelling Growth Estimates	1.46%	Advanced	2023
	Goulburn Valley Water	Victorian Government Population and Dwelling Growth Estimates	1.5%	Standard	2023
	Greater Western Water	Forecast growth in water connection	2.8%	Standard	2023
	Lower Murray Water	Average Forecast growth in urban water and wastewater connections	1.1%	Standard	2023
	Yarra Valley Water	Victorian Government Population and Dwelling Growth Estimates	1.44%	Advanced	2023
ACT	Icon Water	Forecast growth in customer numbers, water and wastewater volumes	1.59%	-	2024
SA	SA Water	Forecast growth in water and wastewater customer connections*	> 1%	-	2024
Tas	TAS Water	Forecast growth in water connections	0.85%	-	2022
Energy					
NT	Power Water	Customer numbers, circuit line length and ratcheted maximum demand	1.69%	-	2024
NSW	Endeavour Energy	Customer numbers, circuit line length and ratcheted maximum demand	1.6%	-	2024
NSW & ACT	Transgrid	Customer numbers, circuit line length, energy throughput and ratcheted maximum demand	1.28%	-	2023

*Note: In the SA Water Regulatory Determination 2024 (SAWRD24), the Essential Services Commission of South Australia (ESCOSA) made a decision to include an additional $4.8 million in operating expenditure to allow for 'natural' growth, which was

defined as the “necessary growth of expenditure to handle increased customer numbers which could include additional treatment, energy and other cost categories”. This was in addition to other growth expenditure proposed by SA under specific projects, which ESCOSA had separately allowed as step changes. ESCOSA calculated this additional expenditure, using SA Water’s proposed forecast changes in connections of 31,762 for water and 26,172 for sewerage over 2024-28.[14]

1.3.3 Real price input changes

IPART has made a draft decision to apply:

- 71% of our proposed real price effects (RPE) factors to our base opex, except for labour and external contractors, and
- a 50% reduction to our proposed RPE factor for labour and external contractors across all services.

This is effectively a close mid-point between AtkinsRéalis’ upper and lower recommendations and is in part based on Atkins’ findings that our proposed RPE analysis should only apply to 71% of operating expenditure, rather than all our operating costs, and that we could seek to manage our labour and contractor prices, as a company in a competitive market might try to reduce its labour and contractor costs.

While we understand IPART and Atkins’ concerns with the application of our proposed RPE analysis, our approach considered that RPE indices are typically proxy measures that are only available for costs where there is observable market price data. The Basic Chemical Manufacturing Producer Price Index (PPI), for example, is used in our RPE analysis as a proxy measure for our chemical costs, even though the index tracks a number of chemicals used in industrial gas manufacturing and basic organic and inorganic chemical manufacturing that we do not purchase. In the absence of available RPE indices for the remainder of our 29% of operating costs such as BOO costs, biosolid costs, insurance and other administrative costs (such as postage), we sought to take a weighted-average approach and apply that to the remainder of costs. This was done in consideration that many of the movements in the available RPE indices were modest and at times, even negative, compared to our actual experience of rising BOO, biosolid and insurance costs.

In relation to IPART’s draft decisions around the labour and external contractors RPE factor, we agree in principle that a company in a competitive market would typically try to reduce its labour and contractor costs. We note however that a significant number of our employee agreements are Enterprise Bargaining Agreements (EBAs), which is typical for utilities sectors where EBAs cover 62% of the workforce compared to the national average of 35%.[15] Across the board, we are further expecting increases in our labour costs, with the incoming legislated superannuation guarantee increases and in line with the NSW Government’s Fair Pay and Bargaining Policy. In light of these some constraints, we therefore ask that IPART re-consider its 50% reduction to our proposed RPE factor for labour and service contractors.

1.3.4 Efficiency factor

We welcome IPART’s draft decision to accept our proposed compounding trend efficiency factor of 0.7% p.a., which IPART considered was consistent with information they obtained on multi-factor productivity (MFP) estimates across 16 industries.

[14] ESCOSA (2024) SA Water Regulatory Determination 2024 - Final Determination: Statement of Reasons , pp. 232-4

[15] Oxford Economics Australia (2024). Sydney Water: Cost Escalation Forecasts to 2034/35.

1.4 Step changes

In addition to our baseline and trend operating expenditure, we sought an additional $384 million in step changes to meet new and changing regulatory requirements, support customer outcomes, reflect changes to the relationship between capex and opex, and deliver new ways of doing things. This included our commitment to deliver a one-off, business-wide step efficiency of $413 million, in addition to our proposed trend efficiency factor of 0.7% p.a., to drive better value for our customers.

IPART has made a draft decision to accept $194 million of our proposed step changes,[16] with:

- reductions to individual projects, where IPART considered there was limited evidence to support our proposed amount (eg business case, deterioration in performance) or other concerns, and
- the application of a pro-rata approach to our proposed step efficiency.

This reflects a combination of AtkinsRéalis lower and upper bound recommendations.

We accept many of IPART's draft decisions regarding our proposed step changes, including Hawkesbury Nepean Nutrient Management Framework (HNNMF) activities, operational costs for Mamre Road/Western Sydney Aerotropolis, IT propex, and IPART's pro-rata approach to our proposed step efficiency.

We, however, have some concerns that IPART's reduced step changes will impose an unacceptable level of risk on our customers and other stakeholders, with potential impacts to service level and environmental performance. This includes IPART's reductions to water and wastewater maintenance, stormwater remediation and desilting, pre-treatment and digital metering. We have also since received updated cost estimates for our managed services and cloud services, which exceed what was submitted in our *Price Proposal* for our digitalisation costs.

As shown in Table A.1.4, we would like to request that IPART re-instate these specific step changes into our core operating expenditure over 2025-30. We have also applied IPART's pro-rata approach and proposed a revised step efficiency that reflects these step changes.

16 We note that IPART's DDR only provided a gross step of $431.6 million over 2025-30, without including its adjustment to our proposed step efficiency. Based on available numbers in IPART's DDR and our reconciliation, we have estimated IPART's draft decision regarding net step changes, including an adjusted step efficiency, as $194 million over 2025-30.

Table A.1.4 Our revised step changes over 2025-30 ($24-25 millions)

Step change	Our Price Proposal	IPART Draft Decision	Our revised position	Explanation
Water				
Water maintenance	84	29	84	We do not accept IPART's draft decision, as IPART's reductions will severely constrain our ability to continue providing the level of service our customers have come to expect and pose a material risk to our compliance with regulatory requirements.
Pre-treatment	65	2	57	We do not accept IPART's draft decision. In line with our revised capital investment proposal to only include the projects that all contractual committed and in delivery, we are proposing to re-instate the operating costs for these projects.
Digital metering	34	0	26	We do not accept IPART's draft decision. In line with our revised capital investment proposal to re-instate our digital metering program, we are proposing to re-instate the telecommunications costs for these assets.
Property	38	26	26	We accept IPART's draft decision.
Other	52	49	49	We accept IPART's draft decision.
Wastewater				
HNNMF	66	34	34	We accept IPART's draft decision.
Wastewater maintenance	140	73	140	We do not accept IPART's draft decision, as IPART's reductions will severely constrain our ability to continue providing the level of service our customers have come to expect and pose a material risk to our compliance with regulatory requirements.
Mamre Rd/Western Sydney Aerotropolis	47	0	0	We accept IPART's draft decision.
Property	21	15	15	We accept IPART's draft decision.
Other	27	30	30	We accept IPART's draft decision.
Stormwater				
Stormwater remediation	21	5	21	We do not accept IPART's draft decision, as we consider IPART's reduction introduces an unacceptable level of risk to customers and the environment, given the risk of flooding to communities and subsequent damage to waterways.
Property	1	0.7	0.7	We accept IPART's draft decision.
Other	0.7	0.7	0.7	We accept IPART's draft decision.
Mamre Rd/Western Sydney Aerotropolis	0	24	24	We accept IPART's draft decision.
Corporate				

Step change	Our Price Proposal	IPART Draft Decision	Our revised position	Explanation
Digitalisation	159	135	159	We do not accept IPART's draft decision, as we have since received updated cost estimates for managed and cloud services that are higher than what was submitted in our *Price Proposal*.
IT Propex	52	19	19	We accept IPART's draft decision.
Other	-10	-10	-10	We accept IPART's draft decision.
Step efficiency	-414	N/A	-350	We accept in principle IPART's pro-rata approach and have applied IPART's approach to our revised step changes.
Total net step changes (including step efficiency)	384	194*	325	-

*Note: IPART's DDR only provides a gross step of $431.6 million over 2025-30, without including its adjustment to our proposed step efficiency. Based on available numbers in IPART's DDR and our reconciliation, we have estimated IPART's draft decision regarding net step changes, including an adjusted step efficiency, as $194 million over 2025-30.

1.4.1 We accept many of IPART's draft decisions for step changes

IPART has made a draft decision to reduce our proposed step changes across a range of projects and activities, including Hawkesbury Nepean Nutrient Management Framework (HNNMF) activities, operational costs for Mamre Road/Western Sydney Aerotropolis, IT propex, and property costs.

We recognise IPART's view that in some cases, there was limited evidence available at the time to support our proposed amount and in other cases, concerns with double counting. As such, we accept all of IPART's draft decisions regarding these step changes.

1.4.1.1 Hawkesbury-Nepean Nutrient Management Framework

In particular, we wish to acknowledge IPART and AtkinsRéalis findings that the implementation of nutrient offsets is in its early stages and that further piloting is required. Since AtkinsRéalis completed our efficiency review we have made additional progress in developing this program, directly addressing concerns raised by AtkinsRéalis. Key developments include:

- Completion of a business case, endorsed through Sydney Water's internal governance processes and recommended for Investment Review Committee (IRC) approval on 6 June,
- Development of a delivery plan with identified sites and maturity ratings,
- Appointment of dedicated program manager and creation of project manager roles,
- Engagement of an additional supplier, and others identified,
- Securing support from key councils and landholders, and
- Development of a monitoring and modelling plan.

Emerging regulatory and operational factors suggest that the scale of nutrient offset activity may exceed what was originally proposed. The EPA has recently indicated that the nutrient benefit ratio for offsets will be less than 1:1 ratio assumed in our funding request. While offsets still remain a cost-effective compliance method, a lower benefit ratio means more offset activity will be required to achieve the same environmental outcomes.

Additionally, the significant reductions in our proposed capital investment for growth projects in the catchment increase the risk of non-compliance, particularly if growth rates align with our projections for nutrient discharge. As a result of this, offsets mechanism will therefore play an even more important role in managing the risk of non-compliance in nutrient discharge.

1.4.2 Water and wastewater maintenance

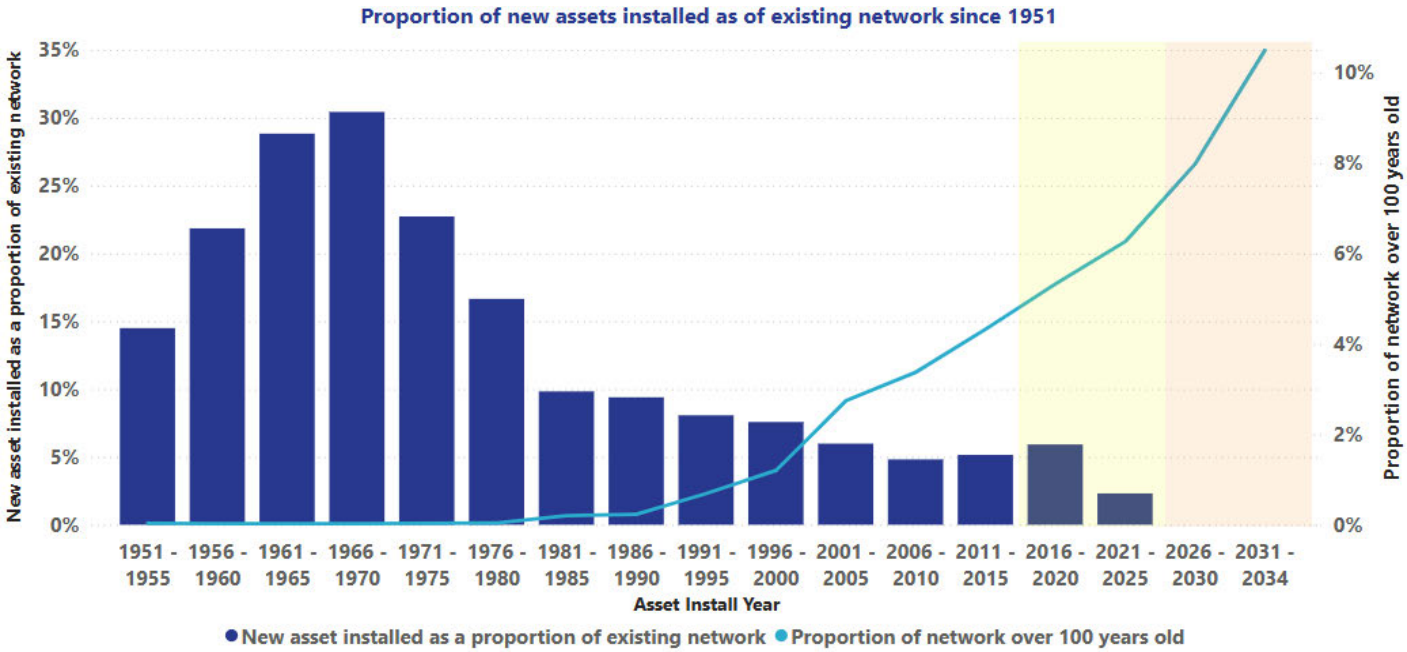
In our *Price Proposal*, we sought additional step changes in water and wastewater maintenance of $84 million and $140 million respectively to address failures in performance of our assets that have occurred over the last 5 years, resulting in customer impact, regulator intervention and court action. Performance is forecast to continue to deteriorate over the next five years unless we maintain and renew our assets more. The need for this increased maintenance work was previously identified in the 2016-20 determination period,[17] but faced significant challenges in delivery with the onset of the COVID-19 pandemic and La Niña conditions. When these conditions came to an end, we revised our maintenance workplans to reinstate this work, recognising that this work would be required until the end of the 2020-25 determination period and throughout the 2025-30 determination period. Supported by further customer engagement, we included a proposed an uplift in water and wastewater maintenance as part of our forecast operating expenditure over the next five years.

IPART has since made a draft decision to reduce this proposed uplift in water and wastewater maintenance to $29 million and $73 million, respectively. This largely adopts AtkinsRéalis' upper bound recommendations and is based on AtkinsRéalis' efficiency review findings that there was a lack of business case, limited data to show an increasing deterioration in performance and/or areas where greater efficiencies could be applied. Relatedly, IPART has also made a draft decision to reduce our capital investment for water and wastewater plant and network renewals by 30% from $3,592 million to $2,484 million over 2025-30.

We recognise that our *Price Proposal* sought a substantial increase in maintenance, as well as renewals, over the next five years. While aspects of our service and environmental performance have stabilised over the last few years, there is still more critical work to be done in areas such as water continuity, leakage, dry weather overflows and chokes. This is particularly pertinent as our assets continue to age and extreme weather events have become more common with climate change. Of the ~50,000 km of water and wastewater pipes we own and operate, we estimate that approximately 10% of this network (~5,000 km) will be more than 100 years old by 2034, as shown in Figure A.1.4.

17 During the 2016-20 determination period, we experienced a significant deterioriation in operating and environmental licence performance after a change in network strategy, which was only exacerbated by then-2017 drought and rising urban density. This necessitated a re-balancing of preventative and reactive maintenance and repair work.
See: Sydney Water (2019) *Attachments to Sydney Water's Price Proposal*, pp. 402-409.

Figure A.1.4 The rate of asset deterioration is increasing at more rapid rates for water and wastewater pipes



At the same time, we understand that our customers are currently facing significant cost of living pressures. We have accordingly revised our expenditure for renewals and maintenance across our water and wastewater plants and networks over the next five years. As set out in **Attachment 2: Infrastructure capital investment**, we propose to accept an increase in risk, by reducing our renewals expenditure by a further $500 million relative to our *Price Proposal* which supports the need to reinstate our proposed step change of $245 million for water and wastewater maintenance.

We have already adopted a 'run to fail' approach for a vast majority of assets, deferring renewals until we are no longer able to efficiently manage the risk to service outcomes and customers' bills. Alongside our revised $3,096 million in renewals capital investment, our proposed step change of $245 million for water and wastewater maintenance represents the **lowest** amount of operating expenditure possible to prolong critical assets with extra preventive work or reactive repairs and address failures when they occur. We note that any additional deferral or reduction to renewals will have a direct impact on increasing maintenance costs and vice versa.

Deterioration in our performance to date

We acknowledge that IPART and AtkinsRéalis shared a view that there was a lack of evidence on the increasing deterioration in our operating and environmental licence performance to support our proposed step change in water and wastewater maintenance. In response, we would like to provide additional information on our performance to date for IPART's consideration.

Across our water system, about 41,000 properties on average have experienced water interruptions due to water main failures between FY 2020 - 2025. While we managed to comply with our water continuity standard in our *Operating Licence 2019-2024*, we came within only 1,700 to 2,600 properties of breaching the licence limits twice during the current period (2020-21 and 2022-23) after breaching the limit twice already in the previous licence period (2018-19 and 2019-20). Our leakage performance has remained outside the economic level of leakage (ELL) band throughout the current period, with the volume of water lost from leaks and breaks in the drinking water system estimated at 131 ML/day as of April 2025. We were further issued a non-conformance and possible enforcement action by IPART against our operating licence which required Sydney Water to improve asset management maturity. The evidence of asset failures coupled with factual data from the Asset Management System demonstrated failures would continue to get worse unless a change in investment was made. In wastewater, our customers and community experienced 3,793 wastewater incidents in dry weather, of which 2,067 reached waterways and contributed to breaching of environment protection licence (EPL – L7.4) over 2020 to 2025.

Outside of these operating and environmental licence measures of performance, we have further faced a significant number of repeat failures, court cases and critical incidents, arising from delays in maintenance and chronic under-investment in renewals of wastewater pumping stations and rising mains. In the last 5 years, we had 98 material harm incidents resulting in 39 incidents reaching waterways in dry weather. In addition, we have faced conviction and/or signed enforceable undertakings (EUs) for incidents at Carramar, Strathfield, Homebush, Wollongong, Shellharbour, Naremburn and Grasmere.

Impact of IPART's draft decisions on customers and our ability to meet regulatory requirements

We have significant concerns that IPART's draft decisions to reduce both our proposed renewals and maintenance expenditure across our water and wastewater systems will severely constrain our ability to continue providing the level of service our customers have come to expect and pose a material risk to our compliance with regulatory requirements. In the long run, an unsustainable level of maintenance further increases the risk of system failures, resulting in more frequent and costly emergency repairs or replacements. These unplanned expenditures are likely to lead to higher customer bills in future regulatory periods, potentially outweighing any short-term savings achieved under IPART's draft decisions.

We have conducted an initial assessment of IPART's draft decisions for renewals and maintenance and its estimated impact on customers and our ability to meet regulatory requirements across different asset classes, as shown in Table A.1.5.

We predominately follow a 'run to fail' strategy with poor condition assets identified but deferred for renewals until it is no longer efficient or economic to do so. This can also occur because available funding is not sufficient to cover all 'avoid fail' poor condition assets, and hence prioritisation decisions are made to continue to defer all except the very worst or very high risk to service outcomes. In practice, this typically results in several 'reactive renewals' where a complete failure forces a last-minute change of prioritisation or expediting of the renewal. Temporary measures to contain damage and accommodate volumes may be required to limit customer and community impact while that 'reactive renewal' is mobilised. This is true even for asset classes where industry standard practice is to 'avoid failure'.

Our revised renewals expenditure is largely driven by validation of poor condition from physical assessments and/or modelling. The condition assessments/modelling also come at a cost and are prioritised using the steeply increasing curve of number of assets past their anticipated failure point (end of life). Our proposed step change in maintenance likewise reflects that as the number of assets past their life continue to be operated due to a limitation in available renewal funding, additional maintenance will be required to more closely monitor and repair these assets in the final stages of life and identify the complete failure so that it can be contained and reactive renewal expedited before significant customer impacts occur.

Table A.1.5 State of our assets and estimated impact on customers from IPART's draft decisions

Asset Class	Asset Condition Data	Link between condition and performance	Possibility of deferral over the 5-year period (FY26-30)	Viability of run to failure approach	Explicit consideration of risk appetite aligning to past incidents	Estimated customer impact of IPART's draft decisions
Water						
Water Main - Critical	2% of the asset profile across the 5,296 km is in worst condition.	On average, 18% of failures are within these worst condition assets.	70 km of "very high risk" critical assets are deferred for the future years and this is above risk appetite.	60% of worst condition assets are planned to operate as Run to Fail. This is outside the industry standard practice, where critical mains are managed as avoid fail.	In the last 5 years, on average 41,000 properties have impacted due to water main failures, and we have either breached or close to breach our OL limits. E.g. The following incidents had severe impact to customers in FY22/23: Lane Cove (4,700 properties), Lewisham (2,200 properties), Mt Colah (1,400 properties) and Guildford (2,750 properties).	Increased response times due to reduced maintenance expenditure in addition to aging network that leads to progressive increase to leakage.
Water Reservoirs	18% of the asset profile across 253 reservoirs is in poor condition	On average, 94% of failures are within these poor condition assets.	267 candidates related to renewals of Mixers, Chlorination units and Roofs are deferred.	64% of poor condition assets are planned to operate as run to fail.	In the last 5 years, IPART made SW non-compliant to OL for three consecutive years because of under investment in Potts Hill and North Richmond Reservoirs.	Risk to safe water supply or restricted water if reservoirs fail prior to planned renewals.
Water Filtration Plants	10% of the asset profile across 5 WFPs (excl. BOO facilities) is in poor condition.	On average, 82% of failures are within these poor condition assets.	Rigorous risk assessment based on public health outcomes, resulted in deferring renewal of assets in 5 process units.	42% of poor condition assets are planned to operate as run to fail.	In the last 5 years, failure of critical assets like raw water pumps, filters and valves in Nepean and North Richmond water filtration plants resulted in issuing water conservation and/ or boil water notices.	Increased conserve water notices leading to risk of boiled water alerts, as majority of pre-treatment works, WFP and reservoir renewals deferred.

Asset Class	Asset Condition Data	Link between condition and performance	Possibility of deferral over the 5-year period (FY26-30)	Viability of run to failure approach	Explicit consideration of risk appetite aligning to past incidents	Estimated customer impact of IPART's draft decisions
Wastewater						
Water Resource Recovery Facilities	17% of the asset profile across 30 WRRFs is in poor condition.	On average, 88% of failures are within these poor condition assets.	Rigorous risk assessment based on safety, environmental compliance, resulted in deferring renewal of assets in 70 process units.	79% of poor condition assets are planned to operate as run to fail. Eventually, some of these will need to be replaced when they become beyond repair.	In the last 5 years, 82 non-compliant by passes resulted in 20 instances where EPA considered legal actions.	Increased pollution of Hawksbury Nepean River due to not completing full WRRF upgrades required in this period. Potential closure of beaches and waterways – high contamination risk and susceptibility to single points of failure due to deferred renewals and maintenance.
Critical Sewer Mains and Rising Mains	5% of the asset profile across the 2,721 km is in poor condition.	On average, 56% of failures are within these poor condition assets.	13km of avoid fail assets are deferred for the future years and this is above risk appetite.	31% of poorest condition assets are planned to operate as Run to Fail. This is outside the industry standard practice, where critical mains are managed as avoid fail.	In the last 5 years, 90 material harm incidents resulted in 31 incidents reached to waterways in dry weather from rising main failures, where EPA considered legal actions. In addition, SW was convicted or signed EUs for the following incidents: Carramar | Strathfield | Homebush | Wollongong | Shellharbour | Naremburn | Grasmere.	Increased wastewater overflows in dry weather due to reprioritisation of limited availability of funds across the wastewater programs, placing more demands on maintenance and response.
Wastewater Pumping Stations	16% of the asset profile across 700 wastewater pumping stations is in poor condition	On average, 94% of failures are within these poor condition assets.	Only mechanical and electrical assets are prioritised for renewals, that have been failed, obsolete or old standards.	93% of poor condition assets are planned to operate as run to fail.	In the last 5 years, 8 incidents resulted in non-compliant to EPL 1.4.	Risk of overflows in dry weather due to limited funds available to complete required renewals

1.4.3 Stormwater remediation

IPART has made a draft decision to reduce our proposed stormwater remediation step change from $21 million to $5 million over 2025-30. This aligns with AtkinsRéalis' lower bound recommendation and finding that these costs can be managed within the envelope without the need for a substantial step change. We have concerns that IPART has not sufficiently considered the operational changes, climate change pressures and changing regulatory requirements, which underpinned our proposed step change.

With respect to operational changes, Sydney Water has identified major design programs that are currently backlogged under existing levels of expenditure. For example, Rouse Hill Retarding Basin 13 at Glenwood (that protects around 18,000 residential homes and 17 educational centres) is at risk of severe flooding without the necessary desilting works to enable additional hydraulic capacity. While AtkinsRéalis' claim that these pressures may be better suited in the baseline allowance may have some merit, it is pragmatic to include this amount as a step for the purposes of transparency to IPART that these assets require a step change in funding to resolve backlogs in our 2025-30 regulatory period.

AtkinsRéalis' acknowledges that this recommendation only includes a small allowance for emergency works. Sydney Water's proposed step change addresses the likely implication of climate change on these assets due to heightened wet weather events that have delayed this work in the past and future wet weather events that impact the performance of the assets in the future. This ensures that these assets can handle the pressure of more severe flooding absorbing the impacts to customers, community and the environment.

Finally, regulatory pressures are not addressed under this draft allowance, noting that five declared dams under the NSW Dam Safety act are classified as stormwater detention assets. Ensuring these assets receive reasonable ongoing inspections and maintenance reflect the efficient costs of meeting these regulatory obligations.

On balance, this $16 million reduction to opex, introduces unacceptable level of risk to customers and the environment given the risk of flooding to communities and subsequent damage to waterways. We request that IPART reinstate our proposed step change of $21 million for additional stormwater remediation works to mitigate these risks.

1.4.4 Pre-treatment

As outlined elsewhere in this response, we do not support IPART's draft decision to reduce the capital investment for our pre-treatment program and have proposed a revised capital allowance of $941 million over 2025-30. This is lower than the $1,131 million in capital investment we put forward in our *Price Proposal* and reflects that we have adopted a higher-risk position in response to IPART's concerns.

Over the better part of the last decade, we have experienced significant raw water quality issues, as a result of La Niña conditions and wet weather events from 2021 to 2023, as well as drought and bushfires from the last 2016-20 determination period. This has seen our water filtration plants being required to treat raw water above normal operational levels for sustained periods of time. On a number of occasions, raw water quality in the Warragamba Dam has been so severely impacted by extreme rain events that we have been required to initiate emergency operation protocols and set up the Emergency Control Centre (ECC) with WaterNSW and NSW Health. In July 2022, for example, we were able to just narrowly avoid a boil water notice to 4 million customers supplied by Prospect Water Filtration Plant (WFP) through emergency protocols, careful management and the easing of wet weather. With extreme weather events expected to become more common in the future, this decline in raw water quality will be a growing trend.

Our proposed pre-treatment capital program, which involves upgrades to our assets at our Prospect, Nepean, Cascade and Orchard Hills water filtration plants, would add an extra layer of treatment to our existing plants to help remove contaminants from incoming raw water, easing pressure on the downstream processes and improving our capability to manage water quality events with reduced impacts on customers. This investment is necessary to ensuring that we meet our customer priorities around water quality and reliability and continue to comply with the ADWG, especially as we continue to face increasingly volatile climate events.

In line with our revised capital investment, we ask that IPART re-instate a revised $57 million step change in operating expenditure required to support our pre-treatment program over the next 5 years.

In the event that IPART disallows our pre-treatment program in its final decision, we note that we may incur additional operating costs to monitor raw water quality and prepare as emergency response, as required. Our initial estimate is that we will require an

additional $17.5 million in opex to cover the hire of filter media, emergency dosing operations at Prospect and Orchard Hills sedimentation tanks and labour costs for ongoing monitoring and any emergency response. This would be in addition to significant write-off, contract termination and administrative costs required to stop and/or defer the program.

1.4.5 Digital metering

As outlined elsewhere in this response to IPART's DDR, we are seeking for IPART to re-instate our capital investment for the digital metering program. Our digital metering program is an important part of our water conservation plan, enabling faster identification of potential leaks and more accurate identification of smaller leaks that are not picked up by traditional quarterly mechanical meter readings and providing customers with real-time usage data. The program has a number of business and customer benefits, including greater customer control of bills, cost savings in our metering contracts, and improving network management.

We therefore would like to request that IPART also re-instate a $26 million step change in operating expenditure required to support the telecommunications capabilities of these assets over the next 5 years. Without this step change, these assets do not deliver the benefits that drive efficiencies across the program.

In the event that IPART disallows our digital metering in its final decision, we ask that IPART instead include our operational costs associated with a like-for-like mechanical meter replacement servicing option. As shown in Table A.1.6, we estimate that we would at a minimum require the following costs:

- Telecommunication costs for our existing smart meter fleet amounting $4.6 million, and
- Higher meter reading costs for replaced mechanical meters of $20.1 million over five years.

We note that all these costs are over and above what we have included in our baseline expenditure and have not been captured to date in our trend expenditure. We would also incur additional WaterNSW bulk water costs as part of our non-core operating expenditure, as we would not be able to achieve the savings in WNSW bulk water volumes from digital metering.

Table A.1.6 Additional operating costs for a like-for-like mechanical meter replacement program ($24-25 millions)

Additional costs	2025-26	2026-27	2027-28	2028-29	2029-30
Telco costs for existing smart meters	3.9	4.0	4.0	4.1	4.2
Additional meter reading costs	0.9	0.9	0.9	0.9	1.0
Total additional expenditure if Digital Metering is excluded	4.8	4.9	4.9	5.0	5.1

1.4.6 Digitalisation

IPART has made a draft decision to adjust our proposed step change of $159 million for digitalisation, by reducing the managed services element from $77 million to $61 million and reduced cloud services from $45 million to $36 million over 2025-30. This corresponds to a 20 per cent reduction, due to the uncertainty on both the timing and the cost.

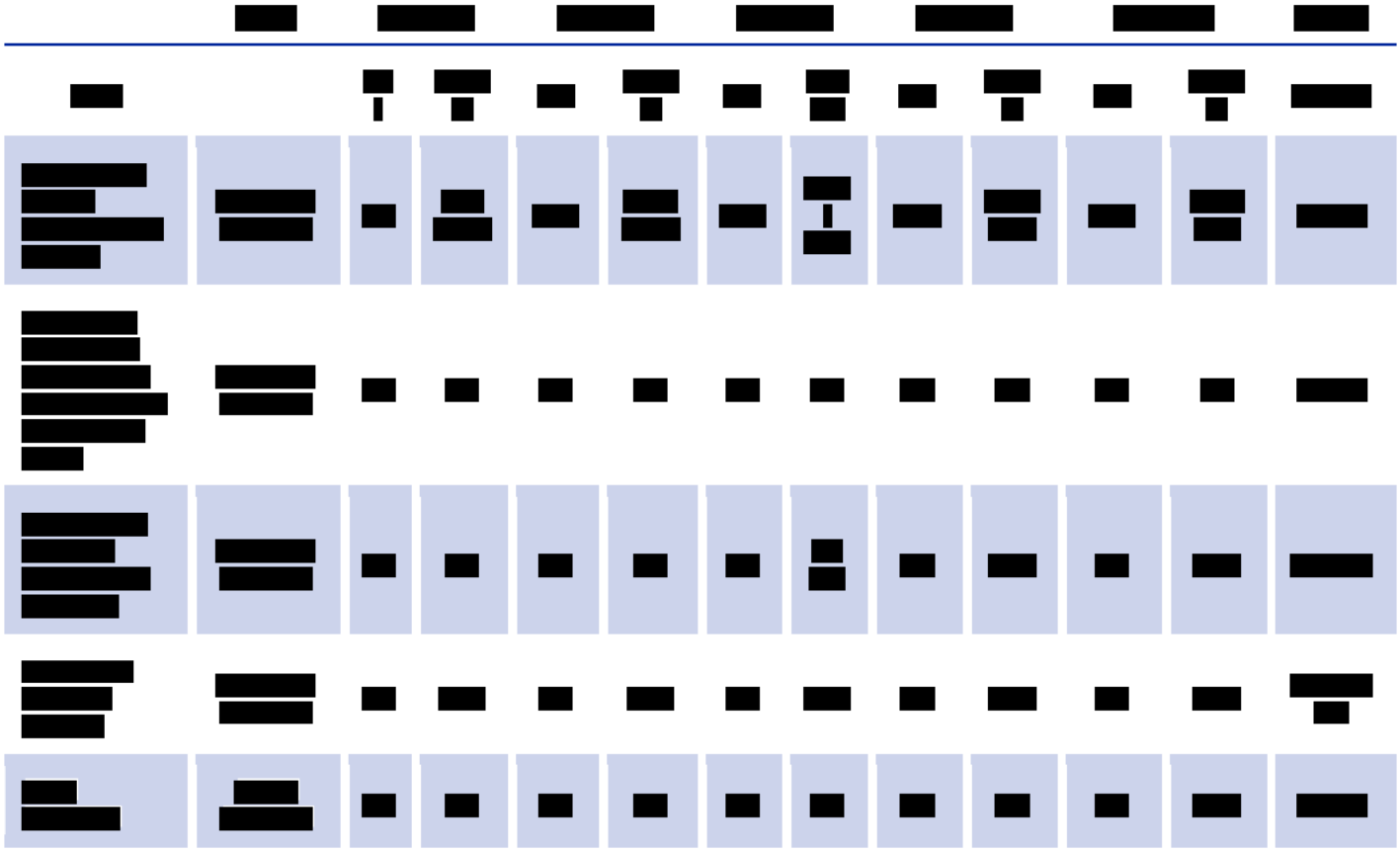
We acknowledge IPART and Atkins' concerns that at the time of submitting our *Price Proposal* and during our efficiency review that there was some uncertainty on both the timing and cost estimates for our managed services and cloud services. Since our efficiency review, we have received additional clarity from the market to update our cost estimations.

Our review is an evidenced position based on:

- **A review of our programs' timelines and outcomes.** We note all programs' inflight have already engaged the managed or cloud services, the costs are known and committed as part of signed agreements.

- **A review of our business cases.** It should be noted that we identified that the step in digitalisation opex includes the reduction in digital efficiencies. For example, Enterprise Service Management (ESM) licence costs are circa $4 million, we have included licence saving $1 million from our existing costs and licences.
- **A review of our agreements with the vendors**. We validated the business cases against the approved deals with the vendors.
- [redacted]

[redacted]



[redacted]

Table A.1.7 is further summarised in Table A.1.8 to demonstrate the difference in the 'step' change with the updated cost estimates. In the first year, there is a minus 2 per cent difference. This is primarily due to two programs shifting into 2026-27 for their first year OPEX costs and one program taking the full contingency. We note that we have removed contingency from 2025-26 and 2026-27. The remaining years range between 2 to 8 per cent increase difference.

21 Continuous is the costs for operating an Azure cloud, and leveraging capability like Data and Analytics, Customer experience, IoT etc, that grow on an annual basis to gather insights for our people, and enable our customers to better interact with us.

Table A.1.8 Summary of the difference in the cost estimation between original submission and our latest review

Category	2025-26	2026-27	2027-28	2028-29	2029-30
Managed and Cloud Services ($24-25, $million)	-0.4	+1.8	+1.4	+0.5	+1.6
% difference	-2%	+8%	+5%	+2%	+5%

Based on this updated cost information, we would like to request that IPART re-instate the $24.3 million reduction to Digitalisation and to manage any additional managed service and cloud cost increases within this allowance. We would be happy to engage with IPART to provide further details on cost estimation for Digitalisation.

1.4.7 Step efficiency

IPART has applied an approach to pro-rata our proposed step efficiency of $413 million over 2025-30, in line with adjustments to individual project step changes. This effectively adopts the approach taken by AtkinsRéalis.

We support IPART's approach in principle and have accordingly applied IPART's approach to our revised step changes. This results in our revised step efficiency of $332 million over 2025-30. We remain committed to achieving this revised one-off, business-wide step efficiency, as a challenge to ourselves to drive better value for our customers.

1.5 Bulk water costs

IPART has made a draft decision to reduce our forecast bulk water volumes by 0.8% by:

- shifting 5GL of demand from SDP to WNSW for reduced water quality events and maintenance, and
- further adjusting forecast demand to account for IPART's draft water usage prices and the price elasticity of demand.

Taking into account these adjusted bulk water volumes and IPART's draft WNSW Greater Sydney prices, IPART has made a draft decision to set WNSW bulk water costs at $1,226 million and SDP bulk water costs at $1,178 million over 2025-30. This totals $2.4 billion over 2025-30.

We welcome IPART's draft decision to update our WNSW bulk water costs to $1,226 million over 2025-30.

We also generally accept IPART's draft decision to set SDP bulk water costs at $1,178 million over 2025-30, however, request that an additional SDP volume of 15.7GL, with associated costs, should be included in the total allowance so that we are able to conduct planned critical maintenance over the period.

We understand that IPART and AtkinsRéalis share a view that we have taken a risk-averse approach, by including additional SDP volumes and costs above a baseline volume of 35GL for water quality events and additional operational works. IPART has further stated that if Sydney Water forecasts additional operational works such as maintenance for which additional SDP volumes are required, then we should provide some evidence of this in our planning.

In response to IPART's comments, Table A.1.9 sets out the planned critical maintenance works we initially included in our *Price Proposal* and the impact on SDP volumes required over 2025-30. In total, we estimated that we would require 15.7GL predominately in the first three years of the period, on the assumption that the expansion of SDP would occur in the last two years.

In the event that IPART accepts our proposal to include a total additional SDP volume of 15.7GL, with associated costs, to allow us to conduct planned critical maintenance for the respective years in Table A.1.9, we accept an offsetting adjustment would need to be made in WNSW bulk water volumes and costs to maintain the same overall bulk water volumes over 2025-30.

Table A.1.9 Our planned critical maintenance works and additional SDP volumes required over 2025-30

Financial year	Months	Maintenance activity	Days required for SDP	SDP Flow Requirement (ML/day)	Flexible mode additional volume
2025-26	February - April	Pressure tunnel outage	87	220	8.3
	May – June	Pressure tunnel outage	61	125	0
2026-27	July - August	Pressure tunnel outage	62	125	0
	Sept - Oct	Pressure tunnel outage	31	220	2.9
	Jul - Aug	Prospect Pre-treatment Channel 1 Outage	31	250	3.8
2027-28	-	Prospect Channel 2 Repair	5	250	0.6
2028-29	N/A (due to planned SDP expansion at the time of submission of *Price Proposal*)				
2029-30	N/A (due to planned SDP expansion at the time of submission of *Price Proposal*)				
Total					**15.7**

1.6 Opex for 2024-25 deferral year

We thank IPART and AtkinsRéalis for reviewing our historical operating expenditure for the 2020-24 period and the 2024-25 deferral year, but would like to confirm IPART's draft decision on its view of our efficient level of operating expenditure for 2024-25. From the information provided, we observe that IPART appears to have accepted $1,253 million in core operating expenditure for 2024-25 deferral year, using a top-down BTS approach. This is between AtkinsRéalis' lower recommendation of $1,241 million and upper recommendation of $1,255 million.

This compares to our forecast operating expenditure of $1,275 million for 2024-25. We note that the 2024-25 year was an anomalous year, as it was not only a deferral year, but also a year caught in the transition between IPART's previous regulatory framework and new 3Cs regulatory framework. Our expectation was that it would not be assessed as part of the BTS approach under IPART's new 3Cs regulatory framework and would be subject to IPART's historical approach of a bottom-up efficiency review.

In future, we would welcome greater clarity on whether IPART plans to assess the last year of the current determination period, as part of its top-down BTS approach for the next determination period. We note that there can be material variations in opex in the last year of the current determination period, which can be difficult to account for and 'lost' when using the second last year as the base year. Our energy costs, for example, increased by more than 33% from $60 million in the 2023-24 base year to $80 million in 2024-25, driven by significant retail / wholesale rate increases of up to 60% and regulated network rates increases of 20%. We would be open to further discussion with IPART on our recent experience and the appropriate treatment of these variations in future determinations.

Attachment 2: Infrastructure Capital Investment

This attachment provides further detail on our response to IPART's Draft Determination and Report. Our response is divided into the following sections, which align to each of our major infrastructure capital investment programs.

- Section 2.1: Growth servicing
- Section 2.2: Mamre Road and Western Sydney Aerotropolis Stormwater
- Section 2.3: Resilient and reliable water supply program
- Section 2.4: Pretreatment program
- Section 2.5: Renewals – Critical sewers
- Section 2.6: Sustaining capital renewals
- Section 2.7: Water meters
- Section 2.8: Compliance and improvement
- Section 2.9: Infrastructure portfolio adjustment

Our *Price Proposal* is customer focused, and we are pleased to see that all 2020-24 capital investment is deemed prudent and efficient and in the best interest of customers.

Sydney Water's capital investment program is underpinned by a commitment to our customers to deliver safe, clean, and reliable water services while protecting the environment and supporting housing and economic growth. Our strategic investment plans for customer experience, water quality and reliability and environmental protection were developed to deliver on these expectations.

IPART has acknowledged *'that Sydney Water's actual capital investment of $7.3 billion from 2019–20 to 2023–24 was efficient and variances between allowed and actual expenditure were justified.'* [22]. This outcome reflects the growing maturity of our investment planning, delivery and governance processes, and stakeholders can have confidence that our proposed investments for the 2025 to 2030 period are prudent, efficient and capable of being delivered.

We are already taking on considerable risk to manage bill pressure and cost of living concerns.

In developing our *Price Proposal*, Sydney Water made significant compromises to reduce customer bill impacts. **Our capital plan was reduced from an initial $50 billion 'bottom-up' build to $31 billion over 10 years, reflecting a 38% reduction through rigorous assessment of performance, risk and cost trade-offs, to avoid passing on any unnecessary cost to our customers.**

We apply a "just-in-time" approach to growth servicing with phased investments aligned to government housing priorities, deferring any projects considered low-confidence. Similarly, we only invest in renewal and compliance projects that are critical to maintain operating and environmental compliance, deferring capital renewals until a run-to-fail strategy is no longer efficient or viable. These actions reflect a balanced, risk-sharing approach that protects customers from funding uncertain projects while ensuring essential services are maintained at a cost no higher than an efficient competitor would seek to charge.

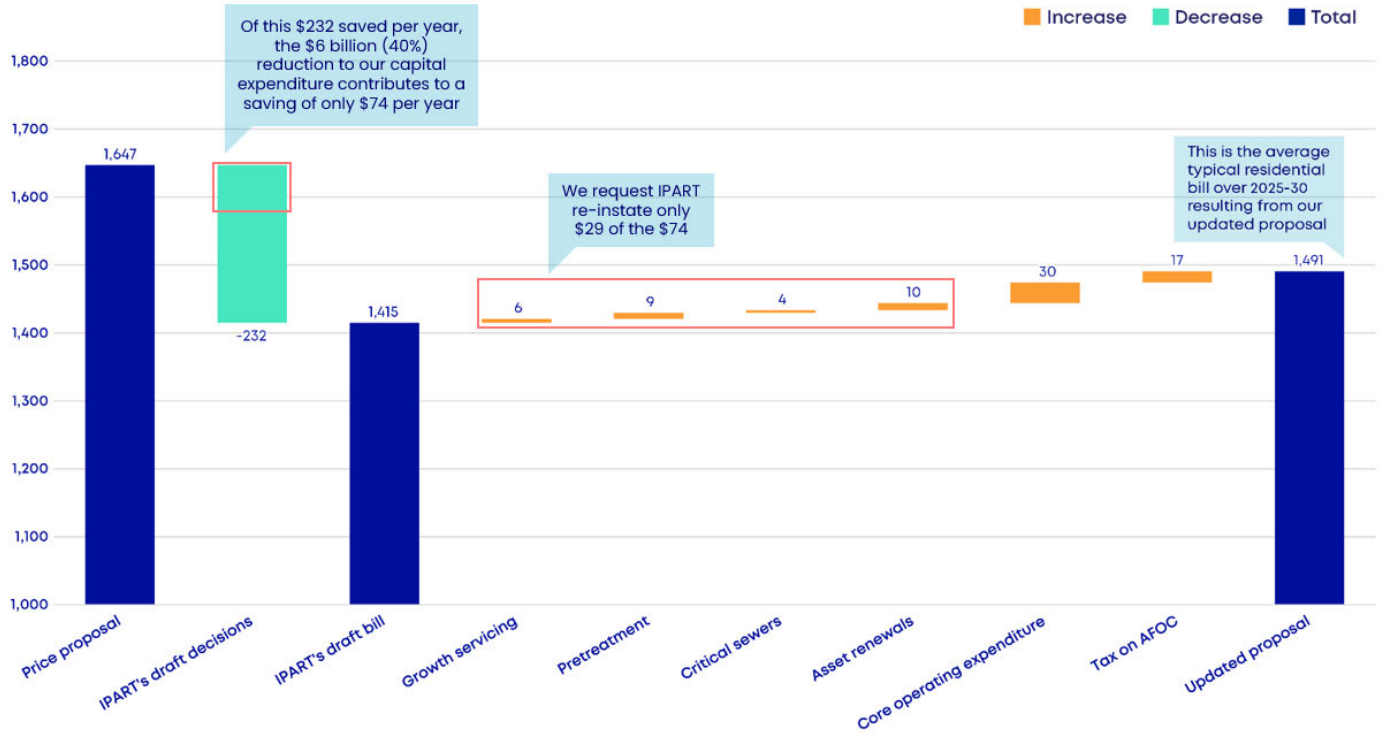
The resulting capital works program is not aspirational; it is essential. It supports critical infrastructure renewals, growth servicing for new homes, and compliance with environmental, health and operating licence obligations to protect public health, the environment, and service reliability.

22 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025 p.59.

The draft determination skews the balance of performance, cost, and risk.

The draft determination proposes a significant $6 billion or 40% reduction across the infrastructure capital program, which equates to a weekly saving of a modest $1.42 per customer ($74 per year), removing just 5.9 percentage points from our original 53.3% price increase. This trade-off is disproportionate and introduces significant short and long-term risks. Whilst trying to find every opportunity to reduce bill impact is important, it comes with risk. We have provided a revised higher-risk lower-cost position to further try to accommodate this.

Figure A.2.1 Drivers of average bill change between SWC proposal, IPART draft report, and SWC counterproposal



The draft determination proposes a high-risk approach to achieving customer bill savings that would compromise our ability to deliver services and support other policy objectives.

These reductions will require compromises as we aim to deliver to our regulated to service standards while at the same time responding to the challenges of growth. AtkinsRéalis note that "*The lower range bound is understood to be the efficient cost of scaled-back basic service levels and reformed operating environment (e.g. policy, legislative or regulatory changes and reduced customer outcomes)*."[23] While AtkinsRéalis concludes that the recommended expenditure allowances should be sufficient, we consider there are material risks to this outcome that can be mitigated to some extent through some adjustments to our proposal.

While it falls to Sydney Water to fully assess these risks and prioritise our expenditure within the allowances determined by IPART, our review of IPART's draft allowances suggests we will have little to no room to do so without compromising on the things that matter most to customers. Simply put, the proposed cuts would put at risk the following for our customers and the broader community:

- Delay the delivery of up to 75,000 homes included in our proposal, undermining NSW Government housing targets.
- Increase risks to the safe and reliable supply of drinking water, both in and out of drought.
- Increase the risk of environmental harm due to untreated sewage overflows to waterways, other sensitive environments and public places.

Further, the scale of unfunded investment means it is not viable to reprioritise or 'spend now and seek recovery later' as we have often done in previous regulatory periods.

23 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 15

We also consider these are material risks with AtkinsRéalis' upper bound scenario, where even AtkinsRéalis acknowledges that the proposed reductions carry considerable risks[24] and that the approach taken to determine these scenarios are not supported by detailed analysis[25].

We stand by the need for increased investment in new and existing water infrastructure to ensure reliable, high-quality services for our customers. At the same time, we recognise our responsibility to balance these essential investments with the realities of customer affordability, especially amid cost-of-living pressures. We have therefore carefully reviewed IPART's draft decisions and challenged ourselves to consider how our original proposal could be amended to reflect the observations made by AtkinsRéalis and IPART while still providing the service required today and protecting the long-term interests of customers.

We understand and respect IPART's critical role as the independent regulator and acknowledge the challenge of reviewing the detail of our proposal in the time available. We also appreciate that there is an inherent asymmetry of information that can make it challenging for IPART and their advisors to fully assess the interconnected nature of our proposals and explore the full impact on risk and performance under different recommendations.

In reviewing IPART's draft report, and the supporting efficiency review report by AtkinsRéalis, we are concerned that critical links between different expenditure programs may have been overlooked or underestimated.

For example, the ability to defer investment in the GPOP Camellia AWRC is contingent on the successful desilting and rehabilitation of the NSOOS under the Critical Sewers Program. However, both programs have had their funding significantly reduced under IPART's draft decisions, creating a contradictory and compounding scenario where neither the existing system can be maintained nor the new infrastructure delivered in time to prevent dry and wet weather overflows (and associated reactive costs) due to development in the upstream catchment.

Such interdependencies are not isolated—across growth servicing, renewals, maintenance (opex), and compliance, our programs are designed to work in tandem to maintain services at an efficient cost in the long-term interest of customers. Reducing funding across programs without a holistic view of the linkages may lead to unintended consequences, such as a higher likelihood of cascading failures, environmental harm, and regulatory non-compliance. For example, the effectiveness of the Pretreatment program in managing poor raw water quality could be negated if the downstream processes at our water filtration plants are not effective or reliable, or network assets such as reservoirs are at risk of contamination or service interruptions due to a lack of maintenance or renewals. The draft determination includes material reductions to proposed spending in all three of these areas, severely restricting our ability to continue providing safe and clean drinking water to over 5 million people.

We are also concerned that the AtkinsRéalis recommendations on each investment program are often supported by a simplistic or cursory assessment of the associated risks.

Indeed, this is acknowledged at various points in their final report, where risks are identified[26] but not supported by any substantive analysis[27]. We consider this was a missed opportunity for further collaboration during the efficiency review to identify and explore the cumulative impacts of potential recommendations prior to IPART making its draft decisions. We go into further details on this in the relevant sections of this attachment.

We have identified other ways to achieve a bill saving that better balances the risk and will deliver the outcomes our customers expect

Our response demonstrates that, for a relatively modest incremental increase in customer bills, the required service outcomes can be managed. This updated and amended approach frames our response and reflects our commitment to balancing customer affordability with the need for essential upgrades to our water services. In relation to capital investment, this submission sets out a $2 billion reduction over five years compared to our original proposal through the following adjustments:

- A reduced pretreatment program focused on in-flight projects (Prospect, Cascade, and Nepean), saving $222 million.

24 AtkinsRéalis (2025) IPART Sydney Water Expenditure review examples growth risks p.154-170, renewals risks p.204,205,206,227,229,230
25 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, "very simplistic assessment" p.150, "this is only an estimate" p.205,207
26 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, examples growth risks p.154-170, renewals risks p.204,205,206,227,229,230
27 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, "very simplistic assessment" p.150 , "this is only an estimate" p.205,207

- A scaled-back critical sewer program aligned with current delivery capacity and focused on the most urgent risks, saving $240 million.
- Accepting an increase in risk by reducing renewals expenditure by a further $500 million reduction.
- Accepting, for the most part, the proposed reduced allowances for Mamre Road and Western Sydney Aerotropolis Stormwater ($580 million reduction), and the Resilient and Reliable Water supply program ($770 million saving).

These adjustments reflect a commitment to balancing affordability with safety, reliability, and environmental protection. However, even these reductions will make it extremely difficult and impact our ability to meet regulatory obligations, deliver essential services to customers, and support government's housing priority.

We also propose that IPART consider regulatory mechanisms that would give us sufficient confidence to invest during the 2025-30 period, if needed for new or emerging challenges not factored into the final determination. These could include stronger demand for growth investment or where the emerging regulatory issues such as those listed in Table A.2.1 become actual obligations.

Table A.2.1 Emerging issues or regulatory developments

Change or Regulatory Development	Date/Status	Implication for Sydney Water
PFAS in Drinking Water – NHMRC Guidelines Finalised	Expected finalisation: Q4 2025 (Draft published May 2025)	Cascade WFP requires additional permanent treatment upgrades to comply with updated health-based values. Investment was not included in original proposal.
PFAS in Biosolids – NSW EPA Regulatory Framework (HEPA-aligned)	Draft published May 2025; final expected late 2025	Biosolids reuse constraints may require increased monitoring as well as capital and operating upgrades to WRRFs earlier than planned.
Workplace Exposure Standards – Safe Work Australia Proposed Changes	Draft revised exposure limits released 2024; final expected 2025	Potential capital upgrades for gas detection and containment systems at WFPs and WRRFs to meet reduced SO_2 and chlorine thresholds.
Beach Pollution Events – EPA Investigation and Response	Oct 2024 – May 2025	Debris balls incidents triggered additional EPA monitoring and modelling requirements. Potential for new discharge standards or licence conditions.

Summary of our revised proposal for infrastructure capital investment

A summary of our revised proposal for infrastructure capital investment (in comparison to the IPART Draft Determination), based upon a commitment to balance customer affordability with the need to upgrade essential infrastructure to maintain customer services is provided in **Table A.2.2,** and discussed in more detail later in this attachment.

Table A.2.2: Proposed Infrastructure Capital Investment ($m)

Investment Program *($m, 2025-30)*	Sydney Water Submission	IPART Draft determination	Sydney Water revised position	Explanation
Growth servicing	$8,326	$6,441	**$8,326**	We do not accept the proposed draft determination position, which places at risk nearly 75,000 new homes across Sydney.
Mamre Road / Aerotropolis	$1,441	$860	**$860**	We accept the draft determination position. However, we are concerned that IPART models over-estimate the capex efficiency from IPART's Mamre review and underestimate both infrastructure contributions and growth.
RRWS – Desalination water network	$828	$0	**$58**	We partially accept the draft determination position. Some ongoing funding is required to continue to progress design and planning.
RRWS – PRW	$478	$431	**$431**	We accept the draft determination position.
Pre-treatment Program *(incl. 2024-25)*	$1,131	$170	**$941**	We do not accept IPART's Draft Decision. However, we are still providing a revised higher-risk position and only including the projects that are contractually committed and in delivery.
Critical sewers renewals	$1,110	$400	**$870**	We partially accept the draft determination position. We are providing a revised higher-risk position in line with current levels of delivery.
Sustaining capital renewals	$3,592	$2,484	**$3,096**	We partially accept the draft determination position. We are providing a revised higher-risk position that is nearly $500m less than our original submission.
Digital Meters	$293	$75	**$293**	We do not accept the draft determination position. Smart meters offer better value for money than like-for-like meter replacements and is line with the same level of customer service of comparable cities.
Compliance / Improvement	$379	$342	**$342**	We accept the draft determination position. However, there is an oversight by AtkinsRéalis in determining their scenarios where they have missed projects in the program. But we will support the reduction regardless.
Portfolio Adjustment	-$1,461	-$1,461	**-$1,148**	We do not accept the draft determination position. The relative percentage (-8%) should be maintained and not unjustifiably increased.
TOTAL *(incl. 2024-25 for pre-treatment program)*	**$16,116**	**$9,742**	**$14,069**	**Our revised higher-risk position is a $2 billion reduction to our original proposal.**

2.1 Growth Servicing

Table A.2.3: Infrastructure Capital Investment - Growth Servicing

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer[28]	Explanation
Growth Servicing	$8,326	$6,441	12c per week	$8,326	12c per week	We do not accept IPART's Draft Decision position of putting at risk 75,000 new homes across Sydney.

NSW is facing a generational housing crisis with both the federal and state governments repeatedly stating that delivering new housing is the number one priority. NSW is signed up to deliver 377,000 homes by 2029 under the National Housing Accord, 263,000 of which are within Sydney Water's area of operations. A range of reforms have been introduced by the NSW Government to unlock and accelerate new housing. Failure to invest at the right levels and at the right time directly undermines the NSW Government's number one priority and risks stalling economic growth across Greater Sydney.

Our growth servicing investment plan is crucial for supporting our expanding city, maintaining a reliable water supply and healthy environment, while building resilience against future droughts and other environmental challenges. We have an obligation to support development by making essential water and wastewater services available to new customers on request, where a suitable point of connection is available.

We do not want our customers to pay more to fund infrastructure that may not be needed in the near term and our proposal maintained a just-in-time approach. Our proposal had already removed around 40% or nearly $5 billion in growth capital investment that was considered to have any uncertainty, and we already have over 60% ($5.1 billion) of the growth program committed and in delivery even before the 2025-30 period commences. IPART's draft decision removes a further $2 billion from our proposed allowance, with a reduction in customer bills of about $0.12 a week (or just under $6 a year) compared with our original proposal.

The proposed reduction of over $2 billion will slow the delivery of new infrastructure, risking the delivery of new homes and businesses

Our proposal sought to enable support the construction of nearly 195,000 new homes over the next 5 years, facilitate non-residential developments (e.g. schools, hospitals, industrial, retail, etc), and investment required to return many of our systems and treatment facilities to full compliance with their regulatory obligations.

Failure to invest at the right levels and at the right time directly undermines the NSW Government's number one priority, risks stalling economic growth, and may lead to reduced levels of service for existing customers and the environment due to the consequences of overloaded infrastructure.

Whilst the difference in growth forecasts and capital investment reduction in the growth capex allowance was presented as a 'top-down' cut of 23% across the program, we have undertaken an initial assessment of the potential impact across the six growth areas considering factors such as the status of major projects in delivery and the level of planning already completed. We estimate that the $2 billion reduction in growth capex will require reductions ranging from 13% to 38% at a regional level, resulting in the following impacts:

- potentially put at risk the delivery of up to 75,000 new dwellings to 2030 as well as 30,000 equivalent non-residential development;
- require the continued use of interim servicing arrangements such as wastewater tankering, which also requires additional operational expenditure;

28 Customer bill impacts in this attachment are estimated using our understanding of the profiling of cuts AtkinsRéalis suggested in its final report, smoothed over the regulatory period and estimated regulatory asset lives.

- prevent us from reducing the number and severity of material harm events relating to wastewater treatment, such as incidents of untreated or partially treated discharges, or periods of high nutrient loads discharged to the Hawkesbury Nepean River system; and
- the use of stronger measures to balance our licence obligation to allow new connections against the potential negative impact on service outcomes, such as regional development caps to avoid reduced water pressure, water shortages in peak demand periods, and/or higher levels of dry and wet weather sewage overflows.

Many of these risks were also identified by AtkinsRéalis as consequences across both the upper and lower capital expenditure allowances.[29] The relationship between capex reduction to the number of dwellings (residential and non-residential) impacted is complex and different across each region. Some areas are cheaper to service than others, some areas have projects already in construction, and some areas have different development density and composition (residential/non-residential) and stages of release. Whilst Sydney Water would seek to minimise impacts, the size of the proposed reduction and the long timescales of growth investments make fully mitigating change impacts difficult. A summary of the potential impacts is discussed below.

South West Growth Area (SWGA) & Western Sydney Airport Growth Area (WSAGA)

With $2 billion of capital works already committed, the reductions places subsequent growth servicing across the region at risk. This includes the potential deferral of planned projects and the following stages of in-construction projects, relying on temporary tankering of wastewater until complete, and compliance risks from approved growth arriving at plants for which growth upgrades are delayed (such as West Camden WRRF). Reducing investment would delay subsequent stages of the Malabar System works planned from 2026-29, and potentially delay subsequent development adjacent to the new Western Sydney Airport.

North West Growth Area

For the North West Growth Area (NWGA), proposed reductions could impact new water and wastewater infrastructure to service growth in Riverstone, Castle Hill, Vineyard, Mount Dorothy, Kellyville, Bella Vista and other areas across the North West. The North West Growth Areas is host to an estimated 45,000 additional dwellings and 34,000 jobs by 2030, with reductions in investment risking delay to new housing connections, compliant performance of water and wastewater assets, and delays to flood mitigation works. Delays to trunk infrastructure in the North West may delay development surrounding the Westmead Health Precinct late in 2026-30. Deferring asset amplifications in areas where growth has already occurred (such as Riverstone, Castle Hill and Vineyard) could result in treatment plants not achieving required treatment levels, as well as wastewater network overflows.

Greater Macarthur Growth Area

For the Greater Macarthur Growth region, the proposed reductions could impact growth servicing across the Nepean, Macarthur, and Picton areas. Investment across wastewater treatment, water filtration and water and wastewater network asset would be reduced, impacting Sydney Water's ability to service a forecast demand of 25,000 dwellings and jobs up to 2035. Sydney Water has commitments to service new homes and developments with land rezoning already implemented and construction commenced in some areas, including for Wilton where Sydney Water's timeline for servicing Wilton has already incurred media and community concern. Reduced investment may delay Sydney Water's ability to meet new EPA license requirements, such as at Picton WRRF where Sydney Water is seeking to move away from river discharge.

Central and Eastern City

The proposed investment reductions could impact the Greater Parramatta and Olympic Precinct (GPOP), elements of the Malabar System, areas relying on the Ryde to Pymble transfer main, and the Epping to St Leonards growth areas. Any deferrals create additional risks of noncompliant wastewater system performance (dry weather overflows) and increased nutrient loading to receiving waters if treatment upgrades are deferred. Proposed reductions to related Northern and Southern Ocean Outfall Sewer Main Rehabilitation and Desilting works compound these noncompliance risks. These delays could also impact other areas across Sydney due to the pivotal nature of assets in the region and their interdependency with adjacent growth regions.

29 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, pp.154, 161, 163, 164, 165 & 168.

Greater Penrith to Eastern Creek (GPEC)

Deferrals to growth servicing investment in the GPEC region as proposed will delay servicing to priority growth areas such as Orchard Hills Precinct, currently being rezoned to support 11,000 dwellings in alignment with investment by Commonwealth and NSW Governments in the Sydney Metro line. Sydney Water would be at risk of not meeting demand in areas such as Horsley Park (identified as a location for data centres), St Marys & Penrith CBDs, and Glenmore Park in the latter part of 2026-30. Deferrals also risk extending non-compliances with the Hawkesbury Nepean Nutrient Management Framework (HNNMF) out to approximately 2035.

Illawarra & Cronulla

Over 2020-25, growth has occurred much faster than anticipated with demographic change and housing affordability driving increased demand for housing in the Illawarra. This now requires urgent investment, with deferrals impacting future growth as well as risking compliance issues in the late 2026-30 period if investment is delayed. Investing at the proposed reduced levels could impact servicing commitments made to developers, including later stages of the Calderwood precinct servicing. Additionally, treatment facilities across the Illawarra and Cronulla areas are at or approaching capacity and license performance limits in the near term (2028-30). Deferral of investments already on the critical path would likely result in non-compliances or delays to new connection.

We recommend that IPART consider recent policy settings to support housing and any updated Government forecasts.

Over the past 12 months, the NSW Government has announced a range of new policies, programs and government bodies with a focus on supporting and fast-tracking housing development in NSW. Policies and programs include the Transport Oriented Development Program, Low and Mid-Rise Housing Policy, the Housing Support Program, Urban Development Plan, and Housing State Environmental Planning Policy. They have also set up the Housing Taskforce and the Housing Delivery Authority to fast-track approvals. We understand further initiatives will be announced in the coming months.

Sydney Water has also signed up to the Housing Approval Reform Action Plan, which was announced in February 2025.30 This is a joint initiative between the NSW Department of Climate Change, Energy, the Environment and Water, Sydney Water, and WaterNSW to streamline approvals and accelerate the delivery of critical infrastructure.

A key recommendation from the AtkinsRéalis was that growth expenditure forecasts should align with NSW Government development forecasts, the latest of which is the Sydney Housing Supply Forecast 2023 (SHSF-2023) and published in mid-2024. While we disagree with the basis for this recommendation (for reasons discussed in more detail elsewhere in this section), we note that the various policy measures discussed above:

- are not reflected in the SHSF-2023 forecast;
- provide a strong indication that growth will very likely exceed SHSF-2023; and
- all reduce the risk of growth not eventuating at the scale implied by Sydney Water's forecast, which was cited as one reason why IPART should favour SHSF-2023 instead of our forecast.

DPHI acknowledges on its website[31] that the next iteration of the SHSF will feature a higher baseline forecast.

The suggestion that we should take 12 to 24 months of further delays to growth servicing is at odds with what is expected by NSW Government, Our Minister, Councils, Developers, and the people of Sydney.

We recommend that IPART consider any updated Government forecasts that are available prior to the final determination and adjust the growth capital investment allowance if it considers appropriate. We are keen to work with the Tribunal to assess the impact of an updated forecast on investment needs.

30 Faster water approvals to supercharge housing delivery | NSW Government
31 Sydney housing supply forecast | Planning

We also recommend IPART considers the broader social and environmental implications and risks when making a final determination.

While IPART's draft determination on growth servicing may reduce bills by 12 cents per week, material reductions or delays in new supply could have market implications that would more than exceeds this short-term bill saving. For example, the Grattan Institute - in its submission to the parliamentary enquiry into housing affordability and supply in Australia - stated that "*building an extra 50,000 homes a year for a decade could result in Australian house prices and rents being up to 20 per cent lower than they would have been otherwise.*"[32] Therefore, suppressing supply could impact the NSW and Australian Governments' ability to bring down housing prices, which based on the Grattan Institute's analysis, has a bigger impact on the cost of living than Sydney Water's bills.

AtkinsRéalis identifies several caveats and potential risks for both the individual projects and growth program as a whole, including:

- *The main risk from deferral of the Stage 2 costs would be a potential delay on growth in the area. Options for managing this are limited given the isolated nature of the growth area.*[33]
- *Delays to implementation of the gasification solution may risk Riverstone WRRF biosolids having no beneficial reuse option and requiring disposal to landfill, resulting in overall higher opex. Given the current state of scientific understanding regarding the risks of PFAS and other 'forever chemicals', and clear regulatory direction, it is likely that a solution will be required within Period 1.*[34]
- *An inability to service growth, EPL non-compliances and risks to waterway contamination…risk to water quality and increased issues and complaints.*[35]
- *The Malabar wastewater system currently services over a third of Sydney's population. Further investment deferral creates a risk that the company will not be able to service growth in this area, if it is faster than the SHSF*[36]
- *Further deferral of investment creates a risk that the company will not be able to service growth in this area and/or is non-compliant with the Hawkesbury Nepean load caps, if growth exceeds the SHSF*[37]
- *A significant proportion of costs have already been deferred to Period 2. Further cost deferral creates a risk that the company will not be able to service growth in this area, if it exceeds the SHSF*[38]

In taking a view that customers should not bear growth risk, the draft determination appears to have discounted these risks, the costs of which may more than offset the short-term bill saving that may be achievable under the lower range scenario. We recommend IPART consider these risks along with the further evidence provided in this report when considering their final determination, including the flow-on impact of decisions taken in other areas of expenditure (both capex and opex).

Interface of Renewals and Growth projects

"Approximately 75% of wastewater currently generated within the GPOP corridor is transferred by NSOOS to the North Head WRRF with the remaining 25% of wastewater serviced by the Malabar WW system and carried by the western submain and SWSOOS to Malabar WRRF. Forecast growth is placing pressure on the capacity on the North Head System. Desilting and renewal of NSOOS is currently underway but even with these works by 2031/2032 wastewater flows will exceed the capacity of the NSOOS and place pressure on biological treatment capacity of the North Head WRRF. This will increase sewer overflows in dry and wet weather and non-compliances at North Head WRRF…we have applied a 'risk sharing' approach to ensure that customers do not fund less certain projects in advance."

Infrastructure Capital Investment Overview 2025, page 61

32 Grattan (2021) How to make housing more affordable, Submission to the parliamentary inquiry into housing affordability and supply in Australia p.2
33 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p. 157, p.159
34 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p. 161
35 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p.163,164 & 165
36 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p.166
37 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p.168
38 AtkinsRéalis (2025) IPART Sydney Water Expenditure Review p. 169

AtkinsRéalis provide an overly simplified assessment to support their proposed upper and lower bound scenarios where only $298 million (3.6%) – which is less than our 8% portfolio adjustment - is assigned from their detailed bottom-up project review to the upper bound.

In explaining their top-down approach to determining the upper bound reductions AtkinsRéalis "*acknowledge this is a very simplistic assessment"* [39]. We do not believe that taking an approach of relying on a historical 'run rate' is not a valid reason for justifying their proposed reductions. Sydney Water has developed comprehensive growth service system plans and regional plans and we are concerned this approach does not consider the composition of capital works required in the past (to support predominately infill development) versus having to build major new water and wastewater infrastructure to service in the future.

In the draft determination it notes that *"AtkinsRéalis also undertook a bottom-up assessment of some strategic schemes which supported its top-down assessment and finding for the upper range expenditure. Specifically, the bottom-up assessment identified that costs could be reduced by 9% compared to Sydney Water's proposal."* We do not agree this statement reflects the AtkinsRéalis Report accurately where in their bottom-up review AtkinsRéalis propose that there was only $298 million in specific scheme efficiencies (3.6%), and then to get to the $7,575 million they add on a further $474 million (5.7%) of '*further growth deferral'* or '*assumed lower growth rate*.'[40]

Further to the issues with the upper bound scenario, the lower bound scenario is simply justified as a "*10% 'stretch' reduction beyond the Upper range scenario, driven by an average 12 month deferral of costs"*[41] with no further justification other than *"Our lower scenario therefore reflects a range of factors (i.e. slower growth or program delays) that could serve to reduce costs to customers."* [42]

We do not believe this is an appropriate approach or justification of reducing $2 billion of growth servicing investment.

We seek further clarification on the methodology used by IPART to determine the overall growth capex allowance

IPART's draft decision is to set a growth capital investment allowance of $6.7 billion for 2025-30 *"based on accepting AtkinsRéalis':*

- *lower range expenditure for RRWS*
- *upper range expenditure for the Aerotropolis and Mamre Road Stormwater*
- *lower range expenditure for other growth expenditure*[43]*.*

According to AtkinsRéalis report the proposed expenditure for those three scenarios are:

- lower range expenditure for RRWS = $431 million [44]
- upper range expenditure for the Aerotropolis and Mamre Road Stormwater = $860 million [45]
- lower range expenditure for other growth expenditure. = $6,441 million [46]

The total of these three scenarios is $7,732 million and not $6,700 million referenced in the Draft determination report. We ask IPART (and AtkinsRéalis) to review this discrepancy when re-evaluating our proposal for the final determination.

The draft determination suggests that we invest ahead of the required growth, when the evidence shows we already apply a 'just-in-time' housing servicing strategy.

Trying to perfectly achieve "just-in-time" growth servicing can be challenging, particularly in a developer led planning environment such as NSW. For perspective, complex new greenfield water and wastewater infrastructure generally takes 5-8 years to plan and deliver; by contrast, the average time from a DA lodgement to a completed home is only a little over 2 years. To ensure prudent

39 AtkinsRéalis (2025) IPART Sydney Water Expenditure Reivew p. 150
40 AtkinsRéalis (2025) IPART Sydney Water Expenditure Reivew p. 175
41 AtkinsRéalis (2025) IPART Sydney Water Expenditure Reivew p. 175
42 AtkinsRéalis (2025) IPART Sydney Water Expenditure Reivew p. 174
43 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 66
44 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 171
45 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 173
46 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 175

investment, we have historically only delivered infrastructure after seeing credible evidence of demand, such as DA approval. In many instances this has not left enough time to deliver infrastructure to service new homes.

The view expressed about the 'early' timing of asset delivery is at odds with the experience of many stakeholders. There are numerous instances over recent years where stakeholders[47] and the media[48] have highlighted a lack of key water and wastewater infrastructure as being a significant constraint on the construction of new housing.

To manage this risk, we have had to increasingly use Interim Operating Procedures (IOPs), such as trucking out wastewater, and/or developer forward funding. At the time of writing this response, seven growth precincts were at high risk of not have permanent infrastructure in place in time to meet demand, with a further 16 considered 'at risk' of not meeting servicing required dates.

We currently have 16 separate IOPs in operation servicing 1836 lots. The alternative is to cap growth. For example, in both Wilton and Austral/Leppington, we have had to cap growth where our services are not yet been delivered and interim servicing was not feasible. In other locations we have had to negotiate with the EPA on Pollution Reduction Programs (PRP) to address specific environmental issues or instances of non-compliance due to growth.

We therefore reject the view that we rely on overly optimistic development forecasts that go beyond government plans and are investing several years ahead of the underlying need.

We see fundamental issues with adopting the SHSF over the high confidence Urban Growth Intelligence (UGI) forecasts. If the SHSF is accepted by IPART as the best forecast, IPART should rely on a more up-to-date version and assume all the growth will be delivered.

The draft determination report claims our growth capex program is based on an overly optimistic forecast that exceeds government plans: *"We [IPART] also agree with AtkinsRéalis that Sydney Water's UGI forecasts may not be appropriate for decision making as they are based on developer information which may be 'overly optimistic'. We note that Sydney Water may have an interest to bring forward capital investment to avoid constraints on growth, but the transition to full developer charges means that the efficient cost recovery from developers will be lower and the cost burden will be borne by customers."*[49]

Sydney Water does not seek to bring forward capital investment for its own purposes; it seeks to meet the NSW Government and public expectation that water and wastewater infrastructure will be delivered in time to meet demand.

We would also like to correct the assertion that the forecast is based on optimistic developer forecasts. While we receive information from the development community, our forecast only considers this information where it is also supported by the NSW Government and Councils through rezonings and development approvals. We have a rich database of information that allows us to understand the trends in each of the growth areas, including ramp up rates for new developments and the rate of housing delivery for existing ones. The information we collect from developers and other sources is sense tested, and confidence levels are assigned using a five-point scale ranging from very low to very high before being added to our datasets. We are careful to avoid double counting, such as when developer intelligence may relate to a precinct or site identifiable in the SHSF. Our forecasts overlay this information upon the 'optimism' of the development community to produce our High Confidence intelligence. The UGI considers non-residential development with a consistent method for addressing data confidence. Strong demand from non-residential development is a major driver of expenditure in many precincts, particularly around the Aerotropolis and other parts of Western Sydney.

Using the SHSF-2023 as a benchmark, IPART suggests the growth we are anticipating is too high and we are investing ahead of demand. Further, IPART suggest that there is a risk the SHSF demand will not be met and that a one year delay to homes should be assumed. As a result, it recommends deferring a significant portion of our expenditure to align with the first four years of the SHSF, citing minimal risk of unmet housing demand. **Table A.2.4** below shows the significant scope and timing differences between the SHSF and our UGI forecast and explains why our forecasts are currently higher than the SHSF.

47 For example, UDIA National Housing Pipeline, Wollondilly Shire Council Press Release - 24 April 2024
48 For example, Sydney Morning Herald 2 Sept 2024 - Feature article, and Editorial column
49 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 68

Table A.2.4: Comparison of DPHI's SHSF-2023[50] and Sydney Water's UGI

	Feature of growth forecast	SHSF	UGI
Geography	Greater Sydney and Blue Mountains	Yes	Yes
	Illawarra	No	Yes
Property Type	Residential	Yes	Yes
	Non-residential	No	Yes
	Other housing types (e.g. aged care)	No	Yes
Timing	Frequency of updates	Annual (12-18 month lag)	Continuously updated
Policy Setting	Housing Accord targets	No	Yes
	Transport Oriented Developments	No	Yes
	Council incentive payments	No	Yes
	Social and affordable housing	No	Yes
Zoning	Zoning horizon	Last updated Dec 2023	Anticipated zoning proposals
	Lots excluded if land is constrained	Yes	No

In Sydney Water's view, the difference between the SHSF and UGI largely reflect differences in timing and scope and are not evidence of an overly optimistic forecast. Indeed, the information we obtain about future development is highly valued by stakeholders and, as shown in the case study below, has also been directly applied by DPHI in their review of the SHSF.

We therefore consider that our high confidence UGI is an appropriate basis to make investment decisions and note similar debates have occurred in previous determinations. Changes in the location, timing and amount of growth compared to the forecast relied on to set out 2020 revenue allowance contributed to Sydney Water investing 30 per cent more than our allowance. All this investment was underpinned by robust, up-to-date growth intelligence drawn from our UGI. All this investment has been deemed prudent and efficient.

The SHSF is a point-in-time estimate based on information already one year out-of-date on point of publication. The SHSF-2023 is two years out-of-date. It does not reflect current policy, development approvals, or the state of the market. It also does not include non-residential development or the residential development in Illawarra. As discussed earlier in this section, If IPART accepts AtkinsRealis' belief that the SHSF is the appropriate forecast (as opposed to the UGI), IPART should rely on a more up-to-date version and assume all the growth will eventuate.

50 We note our proposal is based on DPHI's 2022 SHSF. Dated inputs will change, but does not change relative comparison between SHSF and UGI.

Figure A.2.2 Case Study of Western Sydney DPHI forecasting collaboration

Case study of Western Sydney DPHI forecasting collaboration

The growth capture process that underpins our forecast is robust and reliable. The following examples demonstrate how our insights have identified instances of under-forecasting in the SHSF and directly contributed to DPHI updating the SHSF. It is important, however, to acknowledge that SHSF updates typically lag by 12–18 months and our feedback is typically limited to select parts of the catchment.

2022/23 - Western Sydney Aerotropolis Growth Area (WSAGA)

1. DPHI's initial forecast was around 25% lower for dwellings and up to 60% lower for jobs.
2. Sydney Water's UGI had more up-to-date information based on early developer, master planning documents, and land use density allowances.
3. Sydney Water was able to work with DPHI to re-baseline the published forecast to better align to our UGI.

2023 – North-West and South-West Growth Areas

1. Following work done in WSAGA, we collaborated with DPHI on the variation between the published SHSF and Sydney Water's growth intelligence parts of the North-West and South-West Growth Areas.
2. This led to DPHI re-baselining their published SHSF forecasts.

In these two examples, an additional 70,000 dwellings were added to the SHSF using evidence collected by Sydney Water and validated by DPHI.

Performance of SHSF and UGI against actual completion data – correcting a possible misinterpretation

AtkinsRéalis appear to have placed a high reliance on a graphic presented during the interview phase of the review (which is reproduced as Figure 4-11 in their final report) as evidence the SHSF "has performed reasonably well" and is therefore suitable as a basis to set an expenditure allowance for growth capex.

We consider the figure has been taken out of context. It was intended to show that both SHSF and UGI track well against completions, with the UGI capable of detecting trends earlier (e.g. the dip in completions during the pandemic). The graphic was not prepared as a detailed review of the forecast efficiency of either the SHSF or UGI.

As discussed above, the SHSF is published at a point-in-time while the UGI is updated as new information is received and evaluated. To compare the two forecasts on a more like-for-like basis, Figure 4-11 presented point-in-time SHSF estimates for a single year alongside the relevant UGI forecast available in June each year. This means, for example, that the SHSF forecast shown for FY22 is the forecast for completions in that year as finalised at the end of 2021 (SHSF-21) and published in mid-2022. Similarly, the forecast for FY24 shown in the graphic represents SHSF-23. Each data point is a discrete point-in-time estimate for a single year and bears no relationship to any previous or future period. This was not clearly labelled by us in the graphic, which may have affected the reader's interpretation and the conclusions drawn from that interpretation.

Figure A.2.3 shows forecast dwellings by 2030 under the SHSF, IPART, Sydney Water and Housing Accord scenarios. This demonstrated the difference in assumptions the homes and jobs if AtkinsRéalis and IPART's proposed top-down approach to growth is adopted.

Figure A.2.3 Difference in forecast dwellings to 2030 assumed in the IPART draft determination compared to Sydney Water's forecast in Price Proposal

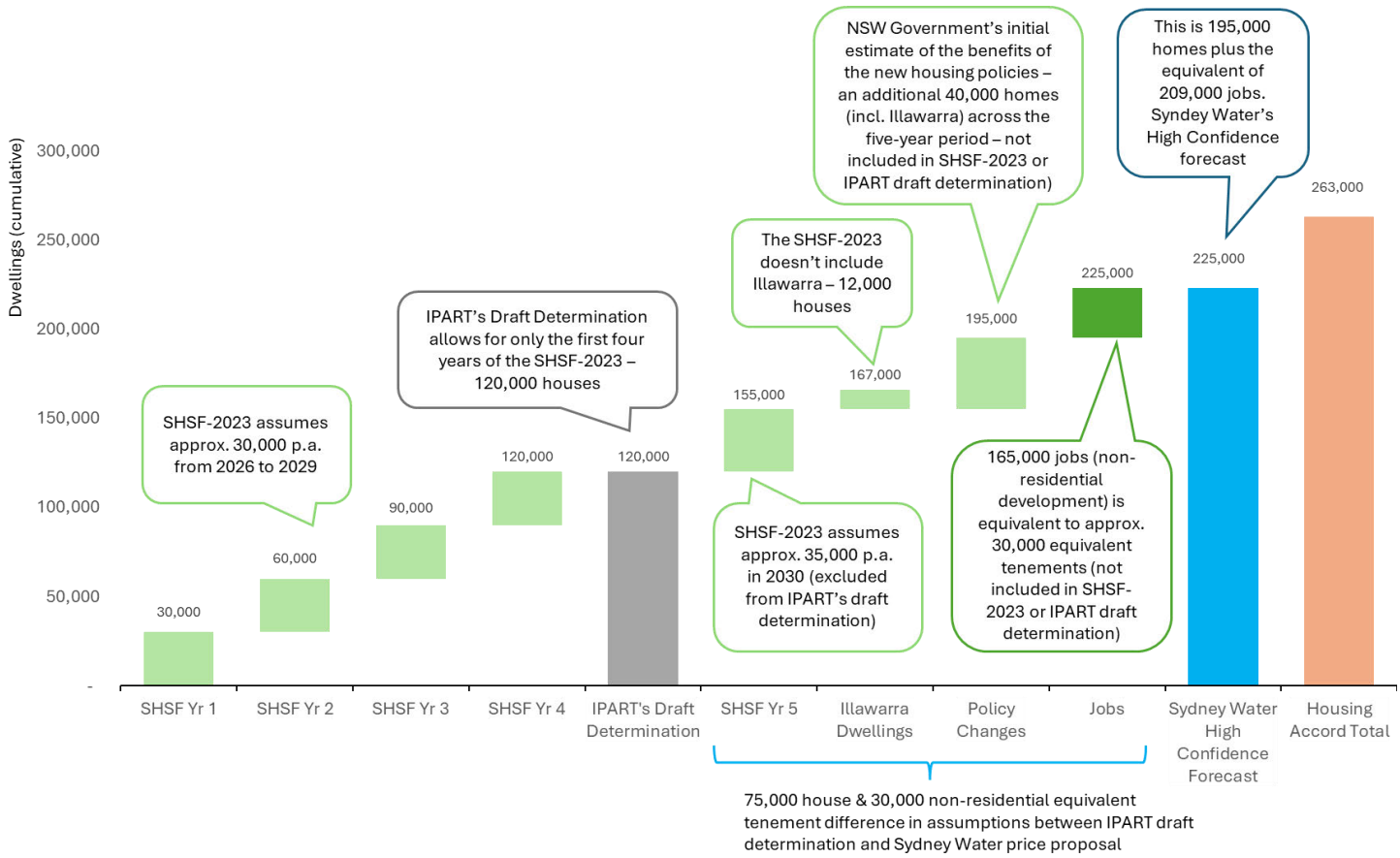
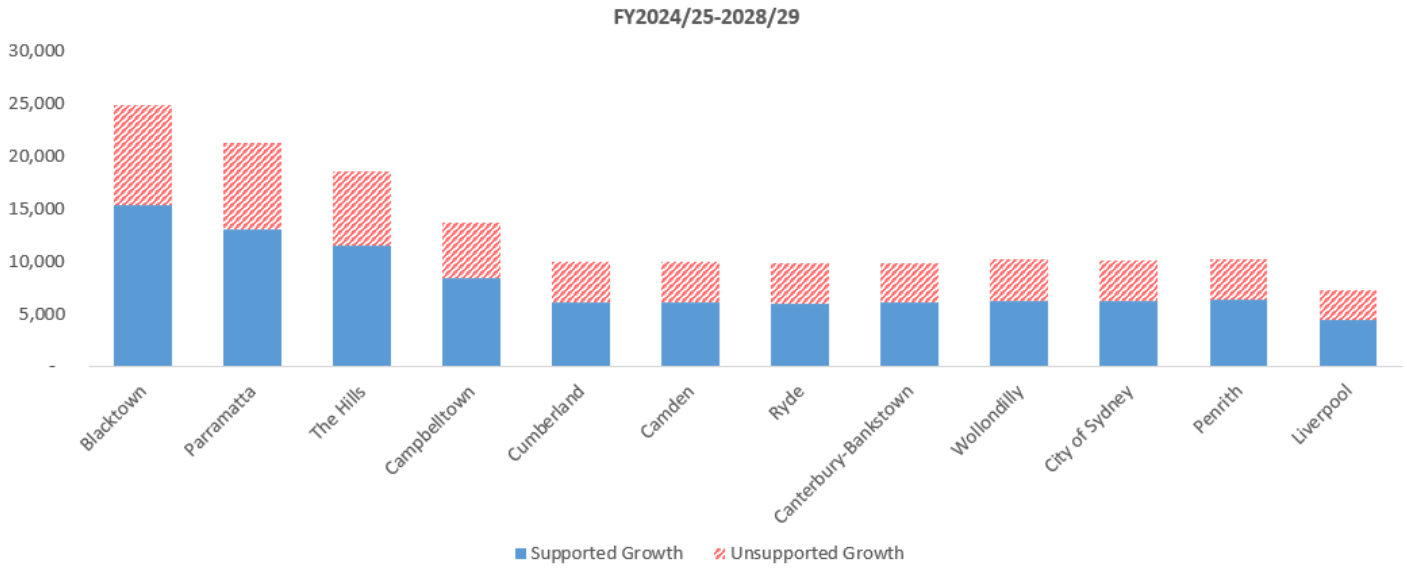


Figure A.2.4: Top 12 LGAs variances of the SHSF-2023 assumptions (proposed as baseline by AtkinsRéalis) vs current forecasts



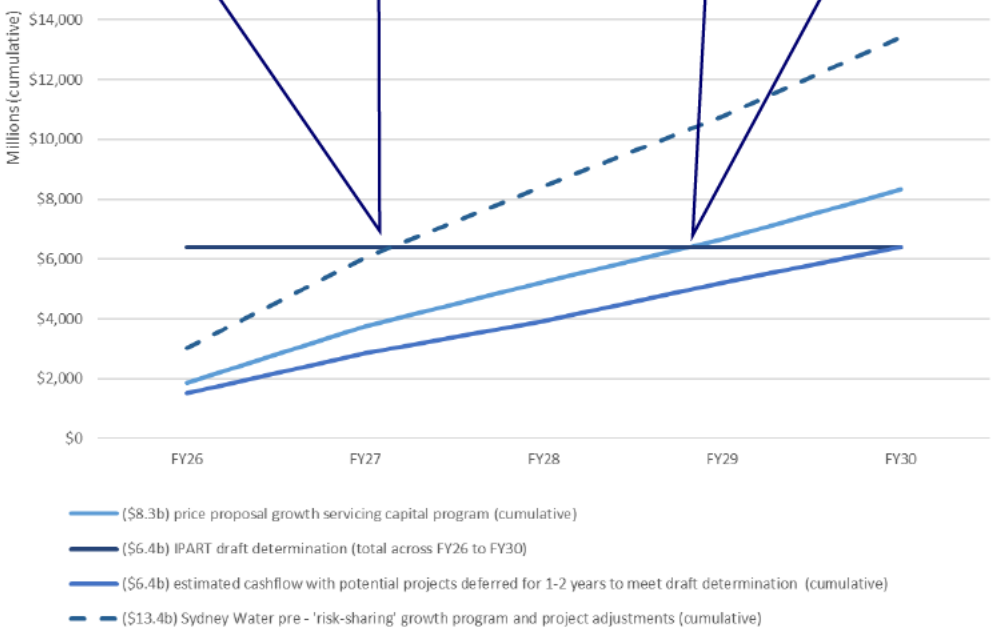
Sydney Water is committed to servicing growth across Sydney, however given the magnitude of the proposed $2 billion capital investment reduction, this will have an impact across various growth region, particularly in the later part of the period.

As discussed earlier, we have done an initial assessment of the impact across the six growth areas over the 5-year period. Typically, we assumed that projects that are committed and in delivery now would still be required to proceed, supporting the servicing of growth in the first part of the period. Projects that are less advanced will be at risk of requiring deferral for between one to three years until the next regulatory period, depending on our ability to reprioritise other parts of the capital program and/or our capacity to invest beyond IPART's growth capex allowance. In a worst-case scenario, there will be no flexibility to invest, equating to at least 75,000 dwellings.

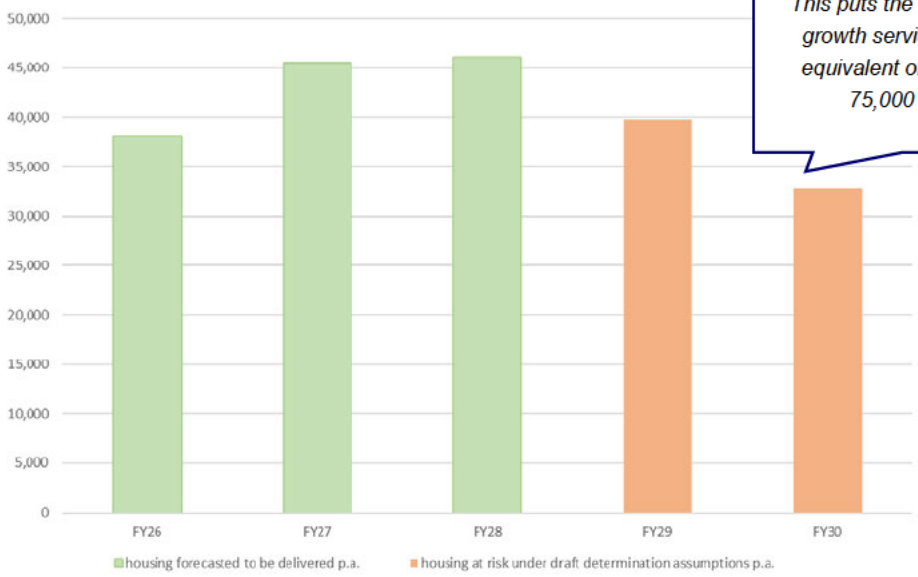
Figures A.2.5 & A.2.6 Analysis that funding will not cover housing connections at back at end of period

Our proposal had already removed around 40% or nearly $5 billion across the next five years to account for any potential uncertainty or forecast risk, where Sydney Water carries this risk ('risk-sharing'). (P135. Sydney Water Price Proposal 2025-30). Under this scenario we would hit the capex limit in the first two years.

*The proposed further reduction of $2 billion requires Sydney Water to start to defer projects in planning **now** to manage risk of overspend at the back part of the period. Under this scenario we would hit this limit by year four.*



This puts the last two years of growth servicing at risk, the equivalent of approximately 75,000 dwellings.



Our submission already considered uncertainty risk and reducing cost to customer, with AtkinsRéalis concluding they could not find any further efficiencies to what to what we have already incorporated into our projects and growth investment programs.

We agree there can be uncertainty when it comes to growth service planning, and for that reason we have already taken considerable risk on growth service to manage any uncertainty and reduce impact to customers across the 2020-25 period.

Considerable review and a significant adjustment (either reduction in overall cost estimate or reprofiling of cashflow) **of nearly $11 billion or 42% has been applied by Sydney Water in our *Price Proposal* across project and programs within the overall growth investment program over the next 10 years**[51] so that we do not to pass on any uncertainty onto customers, an approach that was recognised as prudent and efficient by AtkinsRéalis in their review. As outlined in our *Price Proposal*:

- Over the last decade and last two determination periods we have taken considerable risk on growth and been required to overspend the growth determination on both occasions. In the current period we spent an additional $683 million or 34% more than the allowance because we originally took significant risk on (through our risk sharing approach[52]) and was required to meet emerging growth servicing challenges which has been assessed as prudent and efficient.
- We phased investment to align with the NSW Government's housing and infrastructure priorities.
- We incorporated deferrals and adjustments to reflect the risk that some growth may not proceed as forecast; and
- We sought to optimise existing assets to defer the need for new capacity where possible.

An example of just one of the projects we have moderated our forecasts and taken on risk is below.

Figure A.2.7 Case Study on Upper Nepean AWRC

Growth projects are already substantially moderated in our pricing submission – example

We take on significant risk by proposing costs in our *Price Proposal* well below actual project cost forecast. This is evident in the AtkinsRéalis review when they could not find any further efficiencies that could be applied across our portfolio of major growth projects. The below is an example of just one project – Upper Nepean AWRC , where we are already taking on significant cost risk.

Project forecast for the 2025-30 period: $1,199 million

minus Project adjusted: $720 million (-$479 million, -40%)

minus Growth Area program adjustment: $590 million (-$130 million, -18%)

minus Infrastructure Capital Portfolio adjustment: $533 million (-$58 million, -8%)

Final allowance in *Price Proposal*: $533 million only 44% allowance (-$666 million, -56% from the current project forecast)

AtkinsRéalis review (p.159) potential cost efficiencies: *None identified above the base assumptions*

AtkinsRéalis lower bound and Draft determination: further -23% applied across growth servicing projects = reduction of $123 million = $410 million or 34% of current project forecast.

It is evident that we assume a substantial share of cost-related risk to shield customers from any potential impacts associated with growth timing, cost fluctuations, or uncertainty during the determination period. This proactive approach ensures that customers are not burdened with unnecessary bill increases.

51 Sydney Water (2024) *Pricing Proposal to IPART*, p. 35
52 Sydney Water (2024) *Pricing Proposal to IPART*, p. 135

2.2 Mamre Road and Western Sydney Aerotropolis Stormwater

We agree that our efficient cost to deliver this scheme should align with AtkinsRéalis' findings for the Aerotropolis scheme and IPART's 2024 efficiency review of the Mamre Road scheme however we note:

- IPART's 2024 efficiency review of the Mamre Road scheme resulted in a revised Mamre Road DSP, which was finalised and registered by IPART in May this year.
- Three forecast assumptions relating to the Mamre Road scheme which are used to calculate wastewater and stormwater customer prices proposed in the draft report appear inconsistent with this revised DSP.

As this is a pricing matter, it is addressed in **Attachment 3: Revenue Requirement**

Table A.2.5 Infrastructure Capital Investment – Mamre Road and Aerotropolis

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
Aerotropolis Mamre Road IWCM Stormwater	$1,441	**$860**	**21c per week**[53]	**$860**	-	We accept IPART's Draft Decision. However, we are concerned that IPART's models appear to over-estimate the capex efficiency from IPART's Mamre review and underestimate both infrastructure contributions and growth.

53 As IPART also moved the scheme costs to our stormwater RAB, the amount saved for the typical customer bill (water and wastewater only) are the costs from the entire scheme. We estimate stormwater customers will expect to see an increase of 58c per week from IPART's combined decisions.

2.3 Resilient and reliable water supply program

Our Resilient and Reliable Water Supply (RRWS) program is required to address the water supply shortfall, risk of asset failure, as well as improving water supply resilience aligned with the Greater Sydney Water Strategy.

Sydney Water's core service obligation is to provide safe, secure, and sufficient water to service a growing population, meet regulated levels of service, and ensure that Greater Sydney's water supply is resilient and reliable. The forecast of $1.3 billion over the 2025-30 period is primarily for the expansion of Sydney's desalination plant network (SDP Network, $828 million) and the construction of Quaker's Hill Purified Recycled Water (PRW) facility ($431 million), with a small amount to progress other PRW investments. The position in the draft determination is that the SDP Network project will not be funded, and that only the Quakers Hill PRW investment is funded.

Table A.2.6 Infrastructure Capital Investment – RRWS

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
RRWS – Desalination water network	$828	$0	**17c per week**	**$58**	**<1c per week**	We partially accept IPART's Draft Decision position. Some ongoing funding is required to continue to progress design and planning.
RRWS – PRW	$478	$431	**<1c per week**	**$431**	**-**	We accept IPART's Draft Decision.
RRWS program	**$1,306**	**$431**	**17c per week**	**$489**	**<1c per week**	

We acknowledge that the timing of the NSW Government's decision on the expansion of SDP is still being considered, but there are contractual obligations for Sydney Water, and deferral is not a matter for Sydney Water to decide

The NSW Government issued a Notice of Intention to Expand the Sydney Desalination Plant (SDP) on 20 October 2023. The Security of Water Deed between the NSW Government and SDP Pty Ltd requires Sydney Water to undertake any upgrade or augmentation of our water infrastructure necessary to facilitate the expansion. Under these provisions, we are obliged to plan and complete the works in parallel with the schedule set for the expansion of SDP.

The Security of Water Deed specifies an expansion planning process that includes staged investment approvals. Currently, government is progressing the expansion planning process and is considering the Strategic Business Case for the expansion. Deferral is not a matter for Sydney Water to decide.

To comply with the Greater Sydney Drought Response Plan and fulfill our obligations under the Security of Water Deed, immediate action is required to advance the SDP Network Expansion to a delivery-ready state. The project is divided into two key stages: Stage 1, which involves critical renewals of aging water infrastructure needed regardless of desalination, and Stage 2, which focuses on works necessary to receive and distribute water from the expanded desalination plant. Stage 1 focusses on the mains between Pipehead and Pott's Hill —essential to Sydney's drinking water system — which are over a century old, in deteriorating condition, and run through densely populated areas.

Deferring projects to only commence when drought occurs is a significant risk

Deferring critical water infrastructure projects until drought conditions emerge presents a significant risk. When projects are postponed during periods of normal dam levels, they accumulate and must be initiated simultaneously across all nine of our Water Delivery Systems once dam levels begin to decline rapidly. This creates a surge in demand for water resources—staff, funding, and materials—at a time when they are most scarce and expensive across the water sector, leading to increased costs, delays, reduced efficiency, and ultimately the risk of not being ready in time.

Between 2017 to 2020, Sydney storages depleted 50% in just under two and a half years. Compounding this risk are current negotiations with the government regarding a proposed 5% reduction in dam operating levels, as well as the recent reclassification of the bottom 10% of Warragamba Dam's capacity, as unavailable. These changes effectively reduce the usable storage volume, accelerating potential supply shortfalls. With 15% of the bottom storage unavailable, a drought of similar intensity to that experienced between 2017-2020 could deplete surface water storage in under three and half years, ahead of the completion of the SPDE and network program.

The network project will take longer than the SDP plant upgrade – it needs to start before to ensure that all the water can be used in drought. If Sydney was in drought and this work had to be accelerated, the costs would be much higher than estimated now.

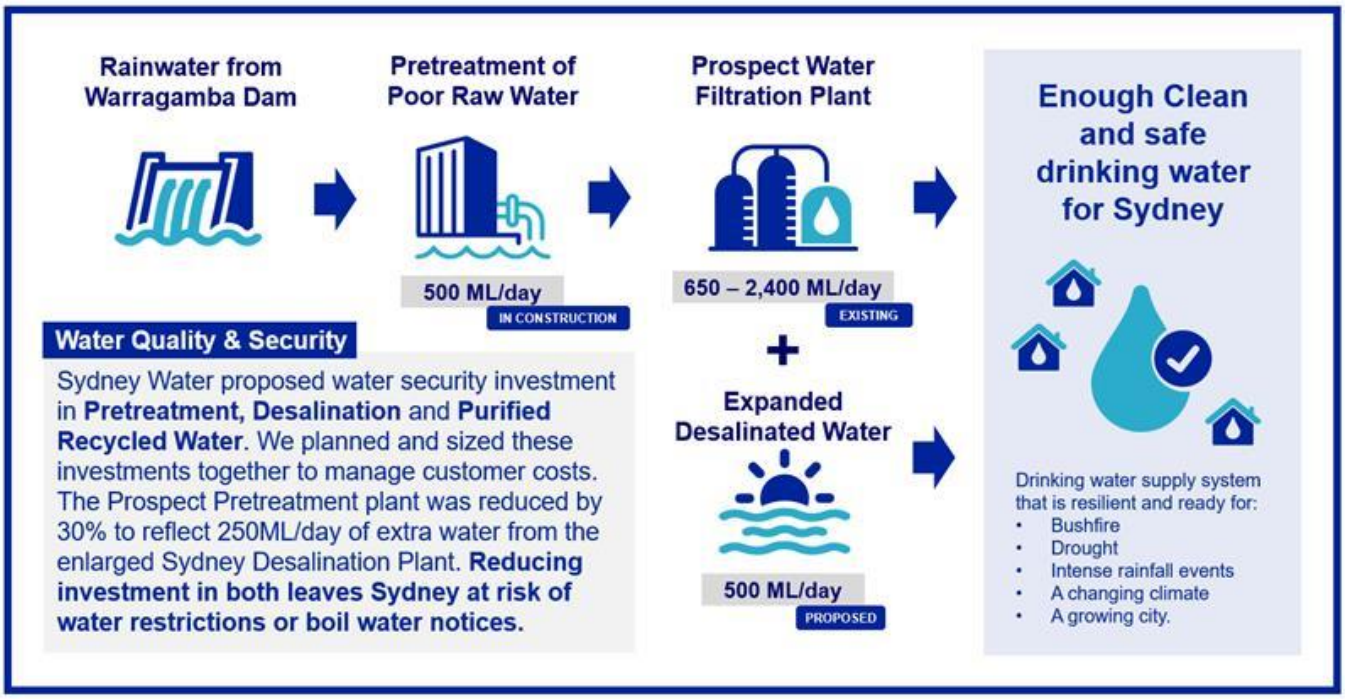
There is an essential link between the Prospect Pretreatment project and the Desalination network expansion that has been missed when cutting both programs in the draft determination

As a water security initiative, the prudent and efficient response to water quality and security risks at Prospect, via the Pretreatment project, was developed in alignment with Purified Recycled Water and Desalination investments.

The benefit of the Sydney Desalination Plant Expansion (SDPE) was utilised in downsizing the Prospect pretreatment facility to balance cost and risk for customers. On the basis that the 250ML/day desalination plant expansion is to progress, the smallest, viable 500ML/day Prospect Pretreatment plant option was selected and now in construction, rather than the original determined 750ML/day plant (which was also reduced from a 1,000ML/day requirement for cost efficiency reasons).[54]

Sydney Water customers and the community are therefore now exposed 'twice' to greater risk of poor raw water quality and supply risk impacts caused by the SDPE deferral and not funding the Prospect Pretreatment project (Section below).

Figure A.2.8 Water Quality and Security managed via an efficient and integrated water management approach



54 Prospect Pretreatment FBC Section 4.2.2, Section 4 and 8 Related Projects tables

Sydney Water customers and the community are therefore now exposed 'twice' to greater risk of poor raw water quality and supply risk impacts caused by the SDPE deferral and not funding the Prospect Pretreatment project (Section 1.4 below).

AtkinsRéalis does not make any reference to the required renewals component of the project in their report

A substantial portion (estimated at c.$650 million) of the project incorporates significant asset renewal. Sydney Water combined the expansion and renewals work together, as it was an efficient and logical way of meeting both needs.

Due to the uncertainty of timing of the expansion of the desalination plant, the draft determination proposes that there is no funding for the entire project (-$828 million). While the asset renewal need was explained in our documentation and discussed during the review, it does not seem to have been well understood by the reviewers.

These assets are beyond the point of 'sweating', and regardless of when the decision is made on the desalination plant expansion these renewal works are essential. The most important part of the renewal scope relates to three 1800 mm diameter trunk watermains between Pipehead and Potts Hill and a distribution chamber. These are critical assets which form a vital part of the current drinking water supply, supporting growth, reliable operations and ongoing inspection and maintenance of related critical assets. These are all at least 100 years old and cannot be relied upon for much longer, especially considering they supply drinking water to nearly two million people and represent a flooding and safety risk to the community. One of the mains is decommissioned and the other two leak constantly despite being operated at reduced pressure to manage risk.

The timing of the renewal works is urgent and unrelated to drought conditions. Moreover, this upgrade is essential to maintain a parallel 3m tunnel that services 3.4 million people. Without the renewal, this tunnel cannot be properly inspected or maintained beyond 2032, creating serious risks if it fails, especially since the remaining operational mains cannot carry its capacity. These works must be completed well ahead of the Sydney Desalination Plant Expansion, as they will take longer to deliver, however they are not dependent on that project going ahead. Table 8.2.7 provides an overview of age and condition of these assets.

Table A.2.7 Major water main and distribution chamber age and condition

Asset	Age	Status / condition
Water main WMN01 (1800mm diameter)	137 years	• Decommissioned in 2014 due to poor condition • Lead in each one of its 2000 joints
Water main WMN02 (1800mm diameter)	125 years	• Operational but condition is poor with constant leaks through corroded joints • Running at reduced pressure to manage risk • Extensive use of lead
Water main WMN03 (1800mm diameter)	100 years	As for WMN002
Distribution chamber at Potts Hill	100 years	• Operational but condition is poor • One wall held in place by temporary brace

If one these assets should fail the consequences for customers and the community could be very serious.

The mains between Pipehead and Pott's Hill — essential to Sydney's drinking water system — are over a century old, in deteriorating condition, and run through densely populated areas. At any point in time, the two operating mains are carrying 40 million litres of water at high pressure.

A main failure would lead to extensive local flooding as there is no way to stop the water in the main from leaving it. Depending on the location of the break there could also be a risk of:

- Injury or loss of life.
- Property damage.

- Extensive disruption to rail or road transport, possible lasting for days.
- Water supply disruption for 2 million people (watermains) or 3.5 million people (distribution chamber).

This aged infrastructure runs for 7km through populated areas in suburbs including Potts Hill, Sefton, Regents Park and Guildford, crossing many main roads controlled by Roads and Maritime Services and local councils, two Transport NSW railway lines and TransGrid 330kV transmission.

We are still required to progress the most urgent renewals regardless of SDP expansion timing but are proposing to not pass these costs on to customer in this period.

We acknowledge there is some uncertainty relating to the time of the SDP expansion decision that we do not want to pass on to customers. We have been, and still are, sweating these assets to efficiently combine with the required expansion works. These renewals works are material and a significant concern.

We are required to, and willing to, progress with most of the urgent renewals at our risk and not pass these costs on to customer in this period to be reviewed ex-post. However, by doing so this will compound the pressure on the overall capital renewals program which is being proposed to be reduced by nearly $2 billion or 40% (and this excludes the $1 billion pretreatment program that has also been proposed to be cut).

We are proposing that IPART reconsiders $58 million of the $828 million in funding to complete all necessary planning and design development.

We must commence planning and design immediately to ensure shovel-readiness for both contractual and drought readiness. In stating that *"the network expansion is not essential to enable the expansion of SDP but accompanies it to enable Sydney Water to service additional demand and address drought risks when the expanded SDP comes online."*[55] the draft determination understates the scale, complexity and schedule constraints of the program of works required from the time the project is triggered to when additional water flow is required to be contractual received by Sydney Water.

It is a complex four year program of works requiring multi stages of new pumping stations, pressure tunnel, reservoir storage, and pipeline construction, with the existing easement next to the in-service mains and the 7km route includes 20 bridge crossings, with coordinated interaction and shut downs with other major infrastructure roads and transport crossings.

Relying solely on a drought response scenario will not allow Stage 1 or Stage 2 works to be delivered within the required timeframe. Given the forecast rate of reservoir storage depletion, the necessary works will exceed the time available.

As presented to AtkinsRéalis, $58 million (P50) is required up to 2026-27 to undertake the engineering, environmental assessments, investigations, economic assessments, financial analysis, cost estimating, delivery planning, project management, concept design, Early Contractor Involvement (ECI) phase of procurement (TBC), delivery planning, and business case development and independent assurance to investment approval.

There are two misconceptions in the draft determination stating *"AtkinsRéalis acknowledges that the network expansion can address single points of failure, but that this represents an improvement on existing risks and customers were not consulted on their willingness to pay for this."* [56]

1. Reference should be made to our fact check comments that were provided to AtkinsRéalis, that customers were consulted on this and feedback was strongly favourable. *'In Phase 5 of Our Water, Our Voice customers considered options for water supply security and were strongly in favour of investing more to lengthen the time to severe water restrictions in prolonged dry weather. This included opting to build new water supply infrastructure. While there are inherent difficulties in determining specific willingness to pay for increasing (non-drought) water network resilience, as per above, customers showed strong loss aversity to any degradation of service for water continuity (phase 4 DCE). Investments to maintain service levels over time inherently involve renewals, augmentation and resilience (reducing single points of failure etc).'*[57]

55 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 67
56 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 66
57 Sydney Water (2025) Fact Check of AtkinsRéalis expenditure review, ID 187

2. Regardless of point 1, the Price Proposal did not have an allowance for single point of failure resilience projects as stated in our submission *"Water System Resilience - Improving water system resilience through addressing single points of failure in our system and building some resilience links. (planning provision only – program adjustment applied)"*[58].

We request IPART reconsider this as part of their reasoning for removing allowance for the Resilient and Reliable Water Supply program.

58 Sydney Water (2024) *Pricing Proposal to IPART* p.88, 96

2.4 Pre-treatment Program

Summary of our proposal

As outlined in our Price Proposal, the quality of raw water from upstream dams has consistently fallen outside the design limits of our water filtration plants for much of the past decade – except during times of very low inflows. This declining trend in raw water quality is expected to become more volatile and worsen with climate change.

Our proposed pre-treatment program would add an extra layer of treatment to our existing plants that helps to remove contaminants from the incoming raw water, easing pressure on the downstream processes and improving our capability to manage water quality events with fewer impacts on customers.

Our updated proposal is to proceed with the construction and commissioning of the three highest priority projects: Nepean, Prospect and Cascade. Nepean and Prospect have already moved into the construction phase, and work is significantly advanced on a package of works to upgrade the Cascade plant to ensure it continues to comply with Australian Drinking Water Guidelines.

We also propose to continue with planning for pre-treatment works at other water filtration plants, including Orchard Hills, Warragamba, Illawarra, and Woronora, but accept that delivery may need to be deferred until the 2030–35 regulatory period. Deferring all these projects comes with a risk that customers may continue to be affected by raw water quality incidents. We will continue to liaise with NSW Health regarding potential risks to drinking water due to adverse raw water events, and will bear the risk that one or more projects need to be brought forward to mitigate health risks.

Table A.2.8 Sydney Water's alternative proposal for pre-treatment

Our original proposal	IPART's draft decision	Our alternative proposal
Improve our capability to deliver safe and clean drinking water to 3.8 million people during adverse raw water quality events by installing pretreatment processes at Prospect, Nepean, Cascade, and Orchard Hills WFPs.	Improve our capability to deliver safe and clean drinking water to around 29,000 people during adverse raw water quality events by installing a pre-treatment process for the Nepean WFP only.	Improve our capability to deliver safe and clean drinking water to 3.5 million people during adverse raw water quality events by installing pretreatment processes at Prospect, Nepean, and Cascade WFPs.
$1,001 million in capital investment $65.1 million in operating costs	$129 million in capital investment $2.2 million in operating costs	$782 million in capital investment $56.6 million in operating costs
2024-25:[59] $130 million in capital investment	2024-25: $41 million in capital investment	2024-25: $130 million in capital investment

Pretreatment requirements

For the better part of the last decade, the water quality supplied to us from upstream dams has been outside the designed filtration envelope of our water filtration plants. This impact is evident at our largest water filtration plant (WFP) at Prospect, which has been **de-rated to half capacity or lower for 47% of the time** due to poor raw water quality. In more than 100 of those days, the WFP has operated at 'Best Endeavours' (where our operating partner does not guarantee the volume of clean drinking water that will be produced on a given day):

Table A.2.9 Warranted (Operating) capacity of Prospect water filtration plant over 2015-2025

Capacity Band	Warranted Capacity (ML/day)	*% of time – past 10 years*
B	3,000	*10%*
A	2,670	*43%*
C	1,500	***44%***
Best Endeavours	-	***3%***

59 No operating costs were incurred for pre-treatment in the 2024-25 financial year as schemes have yet to become operational.

Over the past 5-years, **capacity has been reduced to at least half for 72% of the time**. Sydney Water is not aware of any major city that uses direct filtration alone for such poor raw water quality.

When customer water demands are greater than what can be supplied, then either:

- the drinking water system runs out of water, or
- we put water into the distribution system that has not been adequately treated. (requiring boiled water alerts)

To maintain supply, the latter approach is typically adopted, and customers are asked to boil water before drinking or preparing food. This has widespread economic, health, and social impacts. With continued growth, it is becoming increasingly difficult to meet demand during these events, increasing the likelihood that a request to boil water will be required. During particularly adverse raw water conditions, the flow rate at our filtration plants cannot treat water to safe levels.

As a result, our Price Proposal intended to address the fact that Sydney dams are no longer a reliable barrier for protecting public health. Our pre-treatment program adds an extra treatment step to ensure effective pathogen removal from raw water, ensuring Sydney Water's customers continue to receive safe and clean drinking water under a range of events including moderate to extreme rainfall, bushfire and drought.

With the Sydney Desalination Plant expansion delayed, increased support during raw water quality events will not be available. This increases the need for pretreatment at Prospect WFP. In the moderate rain event in June 2024, a change in wind direction and we would have lost safe supply from Orchard Hills WFP and Warragamba WFP.

Given this, we are concerned that IPART's draft decision implied that since Sydney Water has historically "survived" adverse water quality events without widespread health crises, the urgency for these upgrades was not sufficiently demonstrated.

Table A.2.10: Infrastructure Capital Investment – Pretreatment Program

Pretreatment Initiatives ($m, 2025-30, inc. 2024-25)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Position
Prospect	[redacted]	[redacted]	**16c per week**	[redacted]	16c per week	We do not accept the draft determination position.
Orchard Hills	[redacted]	[redacted]	**5c per week**	[redacted]	-	We accept the draft determination position. We will proceed with investment at our risk.
Nepean	[redacted]	[redacted]	**-**	[redacted]	-	We accept the draft determination position.
Cascade	[redacted]	[redacted]	**1c per week**	[redacted]	1c per week	We do not accept the draft determination position.
Other Systems	[redacted]	[redacted]	**6c per week**	[redacted]	-	We accept the draft determination position.
Program adjustment	[redacted]	[redacted]	**-10c per week**	[redacted]	-	We accept the draft determination position.
TOTAL (incl. 2024-25)	**$1,131**	**$170**	**19c per week**	**$941**	17c per week	Our revised higher risk position is a $191 million (-17%) reduction to our original proposal

Pre-treatment is already undertaken at our Richmond WFP to produce safe quality drinking water and in many places around Australia and the world. This makes it a proven and safe choice to reduce the risks of supply interruptions and enable our plants to meet growing Sydney's needs.

Our future investment program enables existing plants to provide water quality and quantity to our customers:

- Complete the upgrade at Prospect WFP – serves 3.4 million customers, project already procured and in construction.
- Complete the upgrade at Nepean WFP – Single supply system to 29,000 Customers, project already procured and in construction.
- Complete the resilience and reliability upgrade at Cascade WFP – there is a project in progress to upgrade the plant to better cope with poor water quality. The small catchment is susceptible to raw water quality deterioration and the plant serves 50,000 customers and there is limited back-up.
- Progress an investment at Orchard Hills that serves 260,000 customers, who have been issued conserve water notices in the last 3 years.

The draft decision only allows funding for the Nepean WFP, excluding most of the Pretreatment Program – $961 million, or 85% of the program's budget. The single largest project affected is the Prospect Pretreatment Program, with a proposed cost of $697 million over the period. Proceeding on this basis would mean the majority of Sydney Water's customers will be at risk. **The pretreatment program is key to maintaining compliance with Australian Drinking Water Guidelines (ADWG) and delivering our customers' number one objective of safe and clean drinking water.**

Adverse weather conditions are now no longer 'exceptional' or 'unusual', and increasing in severity and frequency

Our services are increasingly exposed to poor water quality issues. IPART's draft report implicitly recognises this, noting that *Weather variation creates uncertainties that may challenge Sydney Water's ability to survive sequential adverse weather events as climate change advances."*[60]

Similarly, the NSW[61] and Federal[62] government acknowledge that the intensity and frequency of extreme wet weather events are likely to increase and set requirements for government bodies to plan for and respond to these climatic changes[63] – now an explicit requirement in our Operating Licence[64].

60 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025 p 71
61 Australian climate change observations | AdaptNSW
62 State of the Climate - CSIRO
63 Climate Risk Ready NSW Guide
64 Sydney Water (2024) Operating Licence 2024-2028 pp12-13

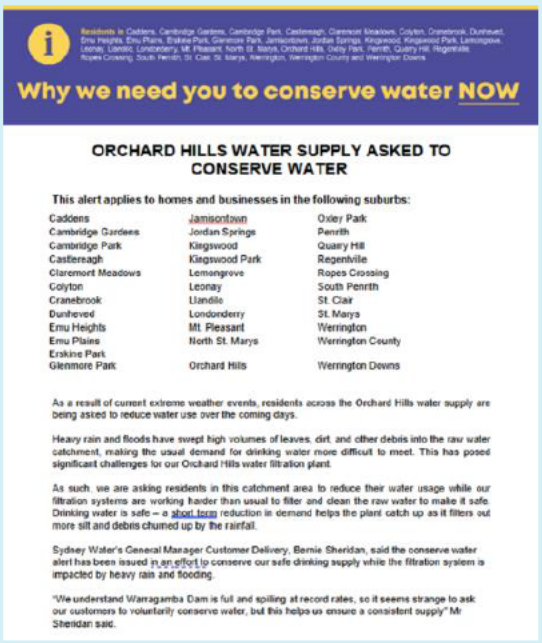
We need to respond to water quality risks to protect our customers and the community

A reliable supply of water is essential service and is the highest priority of our customers. It is also a key concern of stakeholders such as NSW Health. As noted above, when raw water quality is outside the capability of the plants, the usual practice is to continue supplying enough water but issue a 'boil water notice' as directed by the NSW Chief Health Officer. While this approach has only happened in exceptional circumstances in the past, there is a clear risk that it will be much more likely in the future.

Three extreme rain events in March 2021, March 2022, July 2022 severely impacted raw water quality in the Warragamba Dam, initiating emergency operation protocols and stood up the Emergency Control Centre (ECC) including Sydney Water, WaterNSW and NSW Health. These events had different impacts for different systems.

One required the issuing of conserve water notices (one step before a boil water notice) at both Nepean and Orchard Hills in 2022, as demand was higher than sustainable supply. These cannot be relied upon to manage water quality and supply risk in the Prospect system, where **water from Warragamba dam became untreatable and that source was turned off from 2nd July**. The only sources of water were the Upper Canal and the contingency supply from Prospect Reservoir, which are finite. After three weeks, this was no longer sustainable and, only narrowly avoiding a boil water incident for four million people (summary of event below).

Orchard Hills conserve water notice



Residents in Caddens, Cambridge Gardens, Cambridge Park, Castlereagh, Claremont Meadows, Colyton, Cranebrook, Dunheved, Emu Heights, Emu Plains, Erskine Park, Glenmore Park, Jamisontown, Jordan Springs, Kingswood, Kingswood Park, Lemongrove, Leonay, Llandilo, Londonderry, Mt. Pleasant, North St. Marys, Orchard Hills, Oxley Park, Penrith, Quarry Hill, Regentville, Ropes Crossing, South Penrith, St. Clair, St. Marys, Werrington, Werrington County and Werrington Downs

Why we need you to conserve water NOW

ORCHARD HILLS WATER SUPPLY ASKED TO CONSERVE WATER

This alert applies to homes and businesses in the following suburbs:

Caddens	Jamisontown	Oxley Park
Cambridge Gardens	Jordan Springs	Penrith
Cambridge Park	Kingswood	Quarry Hill
Castlereagh	Kingswood Park	Regentville
Claremont Meadows	Lemongrove	Ropes Crossing
Colyton	Leonay	South Penrith
Cranebrook	Llandilo	St. Clair
Dunheved	Londonderry	St. Marys
Emu Heights	Mt. Pleasant	Werrington
Emu Plains	North St. Marys	Werrington County
Erskine Park		
Glenmore Park	Orchard Hills	Werrington Downs

As a result of current extreme weather events, residents across the Orchard Hills water supply are being asked to reduce water use over the coming days.

Heavy rain and floods have swept high volumes of leaves, dirt, and other debris into the raw water catchment, making the usual demand for drinking water more difficult to meet. This has posed significant challenges for our Orchard Hills water filtration plant.

As such, we are asking residents in this catchment area to reduce their water usage while our filtration systems are working harder than usual to filter and clean the raw water to make it safe. Drinking water is safe – a short term reduction in demand helps the plant catch up as it filters out more silt and debris churned up by the rainfall.

Sydney Water's General Manager Customer Delivery, Bernie Sheridan, said the conserve water alert has been issued in an effort to conserve our safe drinking supply while the filtration system is impacted by heavy rain and flooding.

"We understand Warragamba Dam is full and spilling at record rates, so it seems strange to ask our customers to voluntarily conserve water, but this helps us ensure a consistent supply" Mr Sheridan said.

Figure A.2.10 Conserve Water notice issued to customers in July 2022

Figure A.2.11 Case study on the July 2022 boil water notice

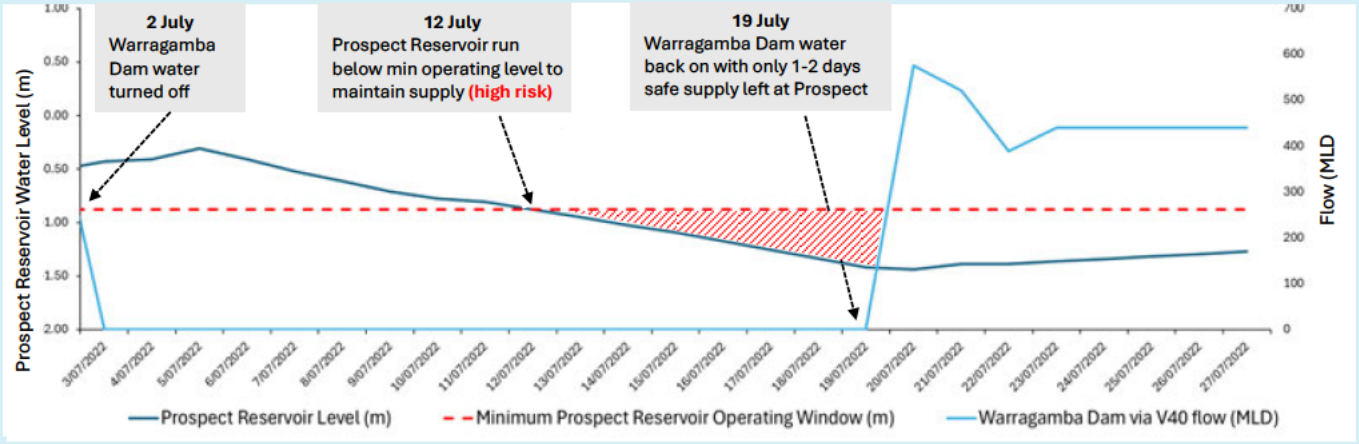
July 2022: Four million customers served by Prospect WFP 1-2 days away from being asked to boil water

On 2nd July, Prospect Reservoir and Upper Canal were required to supply Prospect WFP for three weeks, during which time emergency management processes were established and all available operational controls were undertaken.

On 12th July, Prospect Reservoir was depleted below its usual operating minimum to maintain supply. This can result in additional risks as algae blooms at low levels make the water less treatable.

By 19th July, Prospect Reservoir was at a critical level and at that point all avenues to maintain safe supply to customers had been exhausted.

Figure A.2.12 Timeline of water depletion due to poor raw water quality



Further impact was only avoided due to the rain stopping, enabling treatable water to be transferred from Warragamba Dam to Prospect once again. Despite this, there was still a risk to the raw water from Warragamba Dam – water could have mixed due to cold water intrusion, or an algal bloom may have developed. Water quality in the dam was closely monitored for changes of this nature as this would have rendered the dam water untreatable with no back up for Prospect Reservoir.

Relying on fortuitous reprieves is not a prudent means of managing Greater Sydney's water supply.

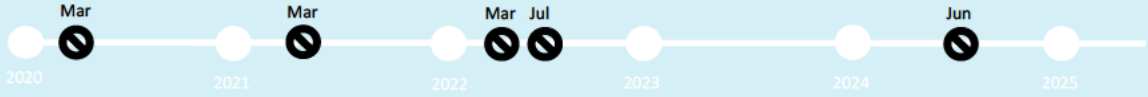
***"Surviving historical adverse events without boil water notices" (pg10, Atkins)* is a not a prudent or appropriate approach to supplying safe and clean drinking water supply for Sydney's population, economy, and essential services such as health.**

Recent events should not be considered as a success story; it was a close near miss which was evidence of a system under strain. More frequent and severe climate extremes and demand growth will increase the strain and we cannot rely on hoping that weather patterns are more favourable in the future.

Examples of repeat emergency management required over the last five years to maintain safe water supply involving the source water from Warragamba Dam are detailed in the table below. With Warragamba offline, other limited sources were used combined with all contingency measures. These are not sustainable over time, Prospect Reservoir which depletes without Warragamba water.

Recent events should not be considered as a success story; it was a close near miss which was evidence of a system under strain. More frequent and severe climate extremes and demand growth will increase the strain and we cannot rely on hoping that weather patterns are more favourable in the future.

Figure A.2.13 Examples of emergency management responses



		Normal Supply regime	Emergency Incidents: Feb-20	Emergency Incidents: March 2021	Emergency Incidents: March 2022 + July 2022
	Emergency Control Centre duration	--	7 days		15 days
	Emergency Operations duration	--	18 days	14 days	15 days
Source Water	Warragamba	High flow	No Flow (5 days)	No Flow (5 days)	No Flow (18 days)
Source Water	Prospect Reservoir	Low Flow	High Flow *	High Flow *	High Flow (7 days)* + Low Flow (40 days)
Source Water	Sydney Desal Plant	Min flow	Max Flow	Max Flow (7 days) + Min Flow (6 days)	Max Flow (28 days)
Source Water	Upper canal	Closed	Med Flow	Med Flow	Max Flow
	Conserve water notice issued	--	--	--	Orchard Hills system (+200,000 customers)

* Achieved Minimum operating level - requiring Warragamba Flow to be started

Our Emergency Control Centre (ECC) includes members from Sydney Water, WaterNSW and NSW Health.
Emergency Operations – at very high risk to public health or total loss of supply to customers.

June 2024

Even a moderate rainfall event delivering less than half the rainfall of four out of the five previous events—nearly triggered a critical incident for Sydney's water supply when over 65% of water column was untreatable at the WFPs, highest offtake used. Had dam turnover occurred, the treatment plants would have received raw water beyond their treatment capacity.

Aligned with the requirements of the ADWG, water provides are required to design out risks to drinking water quality, rather than solely rely on operational controls or emergency measures. It is both unreasonable and irresponsible to avoid investing in sustainable solutions—especially when the safety and trust of millions of customers are at stake, all to avoid passing on an extra 27 cents per week to their customers.

Risk to customers of not continuing the Prospect Pretreatment project

Customers at risk: Over four million

Economic impact of boil water event (economic analysis for business case): $2 billion

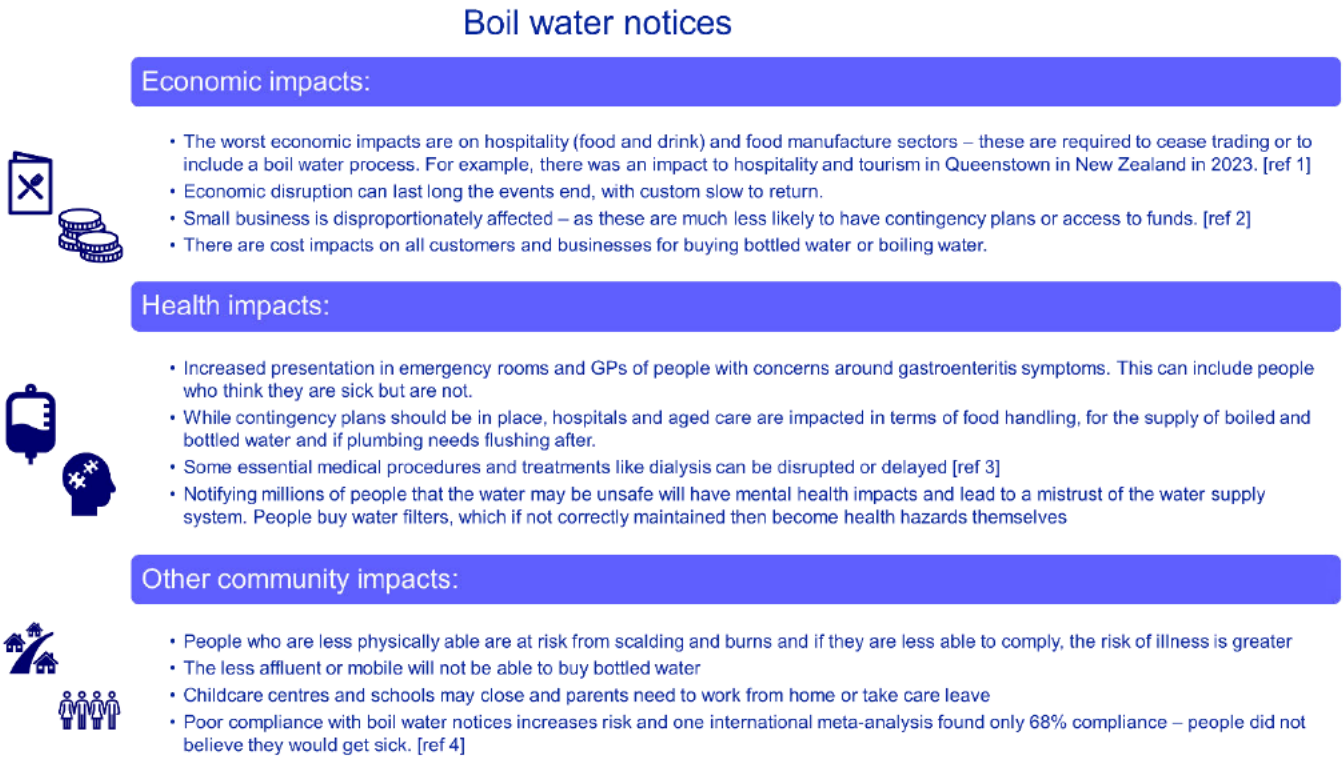
Considerations: Deferring capital investment in pretreatment results in public health risks, leaving Sydney vulnerable to severe supply shortages and potential drinking water safety issues. This risk is exacerbated by the severe reductions applied to WFP renewals (over 74%), affecting our ability to maintain appropriate redundancies for our WFPs.

Deferral of pre-treatment upgrades will result in further exposure to such incidents, for which there is no current mitigation other than to supply unsafe drinking water under conserve water or boil water alerts. While these sound innocuous, they have a serious economic, health and community impacts and disproportionately impact the more vulnerable parts of the community.

There are also significant commercial impacts from having to ask WFP operators to operate outside contracted performance envelope. This exposes us to liabilities with our commercial partners and limits our ability to seek recourse for non-performance.

While our other filtration plants are of a smaller scale than Prospect, around 1 million customers could still be exposed to poor quality and/or supply disruption in the event of a failure.

Figure A.2.14 Economic and Societal impacts for Boil Water Notices



Ref 1: "Tourism operators worry about 'third world' water", Crux article. September 2023
Ref 2: "Community Resilience: Understanding the Economic Impacts of Disruptions in Water Service", Harry S Truman School of Public Affairs, January 2013.
Ref 3: Safely Maintaining Normal Hospital Functions During a Boil Water Advisory: Collaboration, Risk Assessment and Communication", American Journal of Infection Control, July 2023
Ref 4: "A meta-analysis of public compliance to boil water advisories", Sridhar Vedachalam [1], Kyra T Spotte-Smith [2], Susan J Riha · May 2016

In addition to the consequences above, the Prospect project is already in construction and will occur significant cost and other implications if stopped now:

- Site mobilisation has started and construction works have commenced – completing it "sequentially" (after Nepean) as recommended, would be completely impractical and inefficient.
- **Stopping the work would have an approximate cost of $195 million with no benefit to customers**. This estimate includes the sunk cost for planning, procurement, and design[65], as well as for site remediation and contractor compensation in the event of contract termination.

There are also indirect impacts on the provider market and increase in future costs:

- Future procurement might attract a 'Sydney Water risk premium' to reflect potential uncertainty around whether big projects will be stopped after work starts.

Figure A.2.15 Prospect pretreatment Site works (June 2025)

65 It is unlikely that another contractor would accept the novation of design or any works and guarantee the work under another party's design.

- If parties leave the market due to project pipeline uncertainty, then there will be a reduction in market competition for Sydney Water work.

This would negate the significant work to develop and strengthen our supplier base over the last three years, not just for water filtration but across all the large projects in the pipeline.

Risk to customers of not continuing the Cascade pretreatment project

Customers at risk: 50,000, with limited back-up in this system.

Considerations: The Blue Mountains catchment is susceptible to weather events and there have been long term adverse raw water quality issues affecting its community. The Cascade project enables the WFP to treat raw water which is currently out of its design specification.

A provider has been involved early to ensure that the work can be completed safely and efficiently while the plant remains operational. We have also conducted significant stakeholder engagement on the upgrade. This investment is well-supported by the community and needs to be delivered. These concerns have not been addressed in AtkinsRéalis report, nor in IPART's draft decision.

Importantly, this project is *not* related to higher levels of per- and polyfluoroalkyl substances (PFAS) being detected in the catchment in 2024. While the output from the plant was compliant with Australian Drinking Water Guidelines, they were the highest in Greater Sydney. However, this was not provisioned for in our original Price Proposal. New regulation on PFAS in drinking water is expected to be released by the National Health and Medical Research Council in late 2025. If the requirements contained in the draft become regulations, additional investment will be required at Cascade WFP.

These projects are contractually-committed and in-delivery projects, having gone through the process of independent Infrastructure NSW assurance review and NSW Government Cabinet approval.

The draft determination does not provide an allowance for three projects, on the basis that:

- Prospect Pretreatment is not urgent because the risk was managed during the last adverse raw water quality event; and
- The program of work should be staged, to alleviate market constraints and so that lessons can be learnt.

We do not consider either of these conclusions to be correct, having provided a range of information throughout IPART's and AtkinsRéalis review process as to why they need to proceed in the timeframe.

In the short time that AtkinsRéalis' had to review the entire expenditure program, they put forward the position for Prospect that *"…we [AtkinsRéalis] suspect the economic case is more marginal than presented"*[66]

The business case for this project was supported by rigorous economic analysis undertaken by an economic advisor with the methodology independently reviewed by an independent third party against the NSW Government Guide to Cost-Benefit Analysis.[67] Many of the key input assumptions have been subject to statistical and other sensitivity analyses.

The analysis evaluated two short-listed pre-treatment plant size options (500ML/d and 750ML/d)[68]. Both options showed positive Benefit-Cost Ratios (BCRs) with the 500ML/d selected option having a BCR of 4.05. The selected option reflects 42% of the average daily demand at Prospect WFP (1,200ML/d) and this sizing reflects the need to balance the cost with the risk.

The project was reviewed by Infrastructure NSW and NSW Treasury and was approved for delivery by the NSW Government Expenditure Review Committee.

The pretreatment program is not delivering to a higher standard of water quality

We would like to clarify a misunderstanding in the draft decision that the pretreatment program is *"…to ensure **higher** water quality in exceptional or unusual events*"[69]. The program **maintains** compliance with Australian Drinking Water Guidelines (ADWG), and

66 AtkinsRéalis (2025) *IPART Sydney Water Expenditure review* p. 10, 124 & 218
67 NSW Government (2023), NSW Government Guide to Cost-Benefit Analysis TPG23-08
68 Where these capacities represent 42% and 63% of the average daily demand at Prospect WFP.
69 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 72

the ability to operate when changes in conditions lead to lower quality raw water – it does not seek to improve the quality of the water, rather address the health risk.

The program is committed, in construction, deliverable, and sequenced efficiently

Prospect and Nepean Pretreatment projects have commenced construction and the Cascade and Orchard Hills Pretreatment projects are scheduled to progress to construction in 2026-27 with market engagement and early procurement underway. Specifically, Prospect has been procured and is in early delivery (no supply chain issue), Orchard Hills has an approved business case and approved procurement strategy, and Cascade has begun long lead item procurement. At Nepean, different delivery partners are involved and market constraints are in hand. Stopping Cascade would be contrary to community expectations.

Re-prioritisation may not be a viable option

The draft determination concludes that "*We anticipate that Sydney Water would continually review its risks and spending priorities, and optimise its capital program as needed. Our regulatory approach and framework is designed to provide flexibility for businesses to be dynamic. In this respect, should projects such as the Prospect Pretreatment be able to be efficiently delivered and the justification clear, our decisions would not prevent Sydney Water from undertaking it.*"[70]

Given significant reductions made across the entire capital (and operational maintenance) expenditure allowances, there is little scope for reprioritisation. To maintain compliance with our legislative obligations, we are concerned that IPART's draft decision requires re-allocation of funding from the only remaining area – growth. Doing so would mean further deferring housing growth projects, which would have an estimated impact of over delaying over 20,000 new homes on top of the existing risk to up to 75,000 homes under the proposed reduced funding of capital growth program.

While noting that the bill increase is an important and valid consideration, not undertaking the pretreatment program is an unacceptable risk to millions of people

The extent of reductions proposed by IPART across the capital program mean that efficient re-prioritisation is not a valid option, nor is it prudent to hope that emergency measures will suffice, like in 2022.

We request IPART consider a reduced program which includes only the in-flight projects at Prospect, Cascade and Nepean. This would be a total of $782 million over the 2025-30 period, a reduction of $229 million compared to our original proposal and also below the AtkinsRéalis upper bound scenario.

This means that the Orchard Hills project is not funded in the period to 2030 to alleviate any ongoing concerns over deliverability or the need to stage works further. We still need to deliver the Orchard Hills pretreatment project in the future, particularly given the significant growth forecast for its supply area. Should this be needed before 2030, we would have to overspend this proposed allowance to avoid water supply and water quality risk to the 260,000 customers across the Greater Penrith region, a region we have had to issue conserve water notices across before. This will create further customer bill pressure in the next determination period which we ask IPART to consider in their final determination.

70 IPART (2025), Sydney Water prices 2025-2030, Draft Report, p 71

2.5 Renewals - Critical sewers

Sydney Water's Critical Sewer Program is essential to protect the health, safety, and quality of life of our customers and the entire Sydney community.

It is a targeted renewal initiative to rehabilitate ageing (worst condition) and high-risk sections of the critical sewer infrastructure across Greater Sydney to avoid catastrophic failures and significant harm to the environment. The critical sewers program aligns with customers' expectations to prevent pollution rather than respond to it. The program is essential to prevent uncontrolled sewer overflows, protecting the environment, and ensuring compliance with regulatory obligations.

Despite acknowledging the importance of the program and risk of environmental consequences, AtkinsRéalis recommends reducing investment by $710 million, almost two-thirds of the required funding.

As outlined in our *Price Proposal*, we have already reduced the program's budget from $1,930 million to $1,110 million (a 43% cut) by deferring $820 million in capital works to the next period. A further reduction of $700 million (over 60% cut), results in an allowance of only $400 million. This is less than half of what was deemed prudent and efficient by IPART in the 2020 Price Proposal, as highlighted below.

Table A.2.11 Infrastructure Capital Investment – Critical Sewers renewals

Renewal Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
Critical Sewers	$1,110	$400	12c per week	$870	9c per week	We partially accept the draft determination position. We are providing a revised higher-risk position in line with current levels of delivery.

Sydney Water's renewals and maintenance strategy for critical sewers remains unchanged from previous IPART submissions. The program prioritises critical "avoid-fail" assets, including the NSOOS, BOOS, and SWSOOS systems – some of the largest and oldest components of Sydney's wastewater infrastructure. It also includes other critical sewer mains (>300mm in diameter) maintenance holes, odour control units, and chemical dosing infrastructure across Greater Sydney. A failure in any of these systems could have catastrophic consequences, including raw sewage discharges into Sydney Harbour and residential areas, and widespread service disruptions affecting over three million people.

The assets at the centre of this program are in poor condition and carry a high risk of failure. This was supported by AtkinsRéalis, noting that ***'these are by definition critical assets and parts are in poor condition. Works proposed are considered prudent.'***[71] The proposed reductions would significantly compromise our ability to manage this risk and protect customers from the consequences of system failure. This is a prudent investment that protects customers from far greater financial, environmental, and social costs, and ensures the continued reliability of essential services for millions of Sydneysiders.

In conjunction with other renewal, compliance and growth investment programs (such as water resource recovery facility and wastewater pumping station renewals, and the wet weather overflow abatement program – all of which also have reductions to their allowances), the critical sewers program is focussed on bringing our wastewater systems back into compliance and meeting EPA performance and regulatory obligations[72].

As an example, our performance on pollution and environmental harm incidents has been improving but still above the current 460-limit set by our EPA licence requirements (**Figure A.2.16** below). Sydney Water is actively working with EPA to implement a risk-based approach to manage the environmental impact as per changes to EPL requirements. This process will help target assets for

71 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 206.
72 Sydney Water Annual Environmental Performance Report 2023-2024, section 3.5

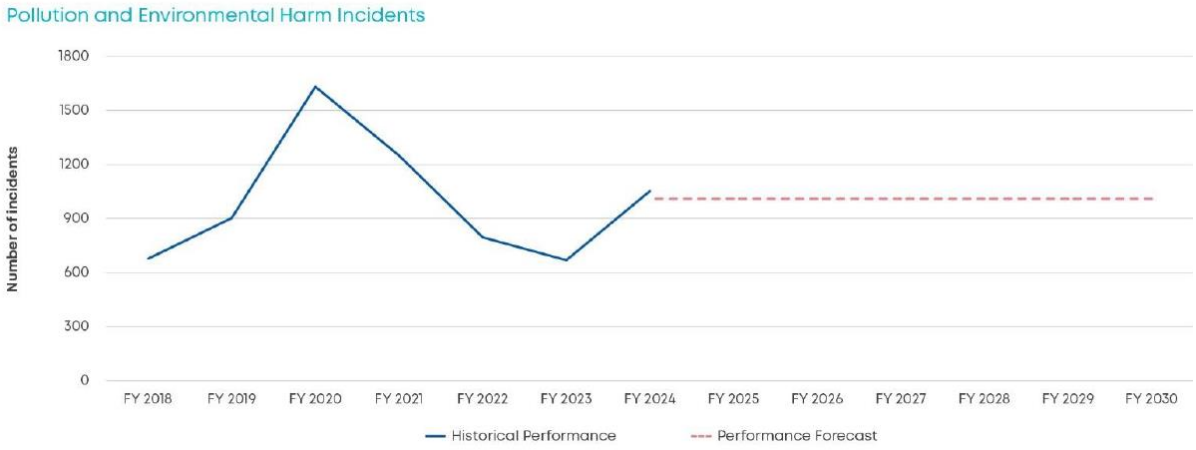
preventative maintenance that are likely to pose a high risk of material harm in the event of failure. Our proposed investment in renewals and maintenance is required to meet these obligations.

Asset failures, recent prosecutions, and other regulatory actions confirm the deteriorating condition of the assets and the urgent need for increased investment.

Nearly 136 km of the total 2,721 km of critical sewer mains and rising mains have been assessed as poor condition and at risk of a high consequence failure. (See '*Table A.1.5 State of Assets and forecasted customer* impact' in maintenance section). Sydney Water is not proposing to renewal all 136km within the 2025-30 period. We take an active risk management approach to prioritise only those that are most critical. In the 2025-30 period we are only proposing to rehabilitate between 18 to 28 km and reline between 20 to 30 km of sewer mains[73], less than 2% of the entire critical sewers network.

The proposed reduction of $710 million or two-thirds of the program would put these critical works at significant risk.

Figure A.2.16 Pollution and environmental harm incidents



Failure of critical sewer assets have already resulted in prosecutions and other regulatory actions (examples below).

Examples of recent Prosecutions and other regulatory actions

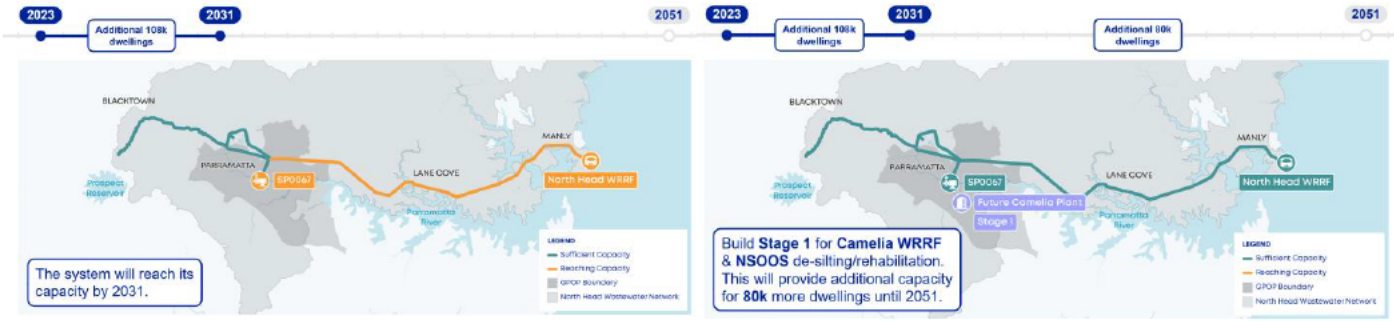
- **Naremburn** – dry weather overflow on 27 October 2020 due to Trunk sewer collapse; Sydney Water convicted of polluting waterways, with a fine of $365,625 issued in July 2023 plus $500,000 to local authorities to fund environmental projects
- **Strathfield** – broken rising main from SP0041 on 6 January 2022.
- **Homebush** – broken rising main on 24 March 2021, $347,100 enforceable undertaking to help fund local environmental improvements.

The NSOOS will reach capacity by 2031 based on current growth projection and that is assuming all required desilting and renewal works are undertaken. Cutting the Critical Sewers program will require bringing forward Growth project such as the GPOP Camellia AWRC which has also had funding cut.

Growth in the NSOOS catchment is at risk of being constrained if the capacity and operation of the NSOOS is not maintained. The 108,000 dwellings capacity requires silt in the NSOOS to have been removed and that the NSOOS has been successfully rehabilitated. Even if the capacity in NSOOS is adequately restored and maintained, it relies upon the GPOP Camellia AWRC to be delivered by 2031, to reduce the flow and load on the NSOOS (as illustrated in **Figure A.2.17** below – 'available capacity' only increases from zero in 2031 if the GPOP Camellia AWRC is commissioned). As the draft determination also proposes a $2 billion reduction to the 2025–30 Growth Servicing budget, there is a risk of delayed delivery of this growth project as well.

73 Sydney Water Wastewater Network Renewals – Program Investment Plan p. 56-57

Figure A.2.17: Area served by the NSOOS and declining capacity of the system



The SWSOOS renewals program is also a precursor for the Malabar mid-term growth project and Millstream re-authorisation with the Federal Regulator.

Growth in the SWSOOS catchment is considerable, with up to 28% additional flow expected by 2036. It is predicted that it will start to reach dry weather capacity by 2032 at which point it sewage overflows will increase, putting public health and environmental safety at risk. **This assumes that current plans to de-silt and remediate the SWSOOS to retain capacity and reliability are not affected by reductions in the draft determination to our proposed critical sewer program or operating costs.** If the de-silting and remediation does not take place, even more significant investment will become more urgent.

This SWSOOS constraint and related system-wide needs are enablers for the Malabar Mid-term project. This is employing an adaptive pathway approach, as the right solution depends on several factors. However, as it is part of the growth servicing plan, this project is also potentially impacted by reductions recommended in the draft determination.

SWSOOS (in red) is an ageing bottleneck - flows converge from a large, growing area stretching more than 50km inland

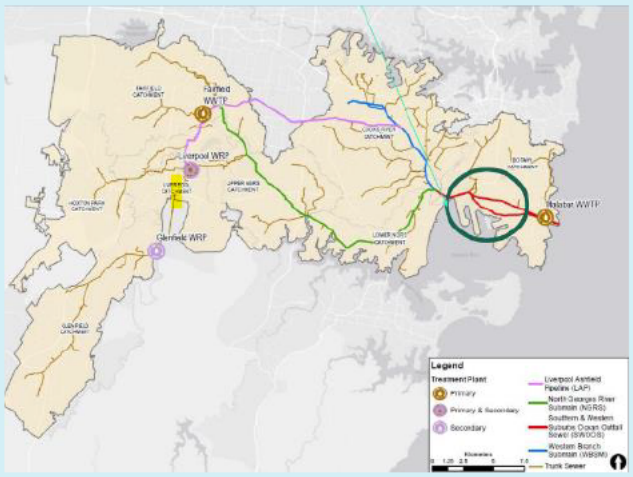


Figure A.2.19 Map of the SWOOS Network

This is another example where the proposed wide-ranging funding reductions provide no flexibility and there is no ability to re-prioritise. In this case, three essential components of service provision (source control, SWSOOS renewals, Malabar mid-term program) are all being reduced and it is difficult to conclude that this outcome will be one that would be in our customers' long-term interests.

Given the complexity and scale of our investment program, AtkinsRéalis may not have appreciated all such interactions when making these significant reductions across multiple investment programs. It appears AtkinsRéalis has not taken into account the role that NSOOS and SWSOOS play in also deferring major growth infrastructure, meeting regulatory requirements at Mill Stream, or the increased risk and long-term cost for customers associated with these proposed cuts.

We acknowledge deliverability on the larger ocean outfall sewers can be difficult but previous delays in 2020-24 were driven by extraordinary factors which have passed. We have addressed any on-going deliverability concerns and are already delivering significantly more.

AtkinsRéalis highlighted the critical nature of these works and that their reduction was based of deliverability considerations[74]. In response, we provided information on levels of contracted committed works and increase in delivery across critical sewers. However, this appears to have been excluded from their consideration.

We acknowledge that delivering critical sewer projects across the 2020-24 period had its challenges. However, the delays experienced during the 2020–24 period were largely due to extraordinary, one-off events that have since passed or been resolved. These included the impacts of the COVID-19 pandemic, multiple 1-in-100-year flood events across 2021 and 2022, and the complexities involved in establishing the new Regional Delivery Partner (RDP) contract at the start of the period. Additionally, the unexpected withdrawal of a key service provider from the market further disrupted progress.

While we understand that IPART's draft decision is based on deliverability concerns and the spend over the current period, as advised by AtkinsRéalis, this does not reflect the broader context of our delivery performance, or the substantial improvements made since those early disruptions. These challenges have now passed, and our delivery capability has materially improved.

In the current FY25, we are on track to deliver over $150 million in capital works across the critical sewers program, which is more than 50% higher than the previous year, in which AtkinsRéalis have based their upper scenario on.

We have taken significant steps to address deliverability concerns and are now achieving markedly higher levels of capital works delivery. In FY25 alone, we have delivered over $150 million in critical sewer network upgrades—more than 50% above the FY24 level. The projected increase in delivery over the 2025–30 period represents only a 15% annual uplift from this current rate, a level well within our demonstrated capacity.

Dedicated contracts and contractors are now in place for major works on the NSOOS, operating independently from other critical sewer projects and are meeting productivity targets. We are also constructing a new access point to the NSOOS to accelerate progress, enable even greater productivity, and reduce risk for the NSOOS program.

We have completed the desilting of 9.3 km of the NSOOS. Detailed planning for the next 5.8 km length of NSOOS Section 1 is also in progress and are the priority focus for NSOOS works in Period 1[75].

It is also important to note that 40% of the Critical Sewer program involves work outside the large ocean outfall sewers, delivered using different resources through our three established Regional Delivery Partnership (RDP) service providers. In these areas, wet weather has less of an impact and the deep tunnel entry is not required. Currently, across 52 in-flight projects in construction, the three RDP service provides are performing between 90% to 106% of their monthly productivity targets.

The significant reductions proposed would result in the risk of stopping in-flight programs and deferring very high-risk packages of capital works.

We have triaged the impact of IPART's draft allowance for critical sewers. This would result in multiple stages of NSOOS and BOOS works being deferred beyond 2030, resulting in debris build up and potentially sewer collapse that leads to wastewater overflows to Sydney Harbour. Additionally, we would have to defer multiple rising main renewals, projects that are required to reduce asset failures, non-compliance, and resulting prosecutions. Finally, we would defer all odour management unit renewal projects, leading to potential of customer complaints and air pollution.

In summary, this would:

- Halt in-flight rehabilitation and desilting works.
- Increase the risk of structural failure and environmental harm incidents and non-compliance.
- Require us to accelerate growth projects (e.g., GPOP Camellia, Malabar Mid-Term), despite the draft determination also recommending a $2 billion cut to the Growth Program.

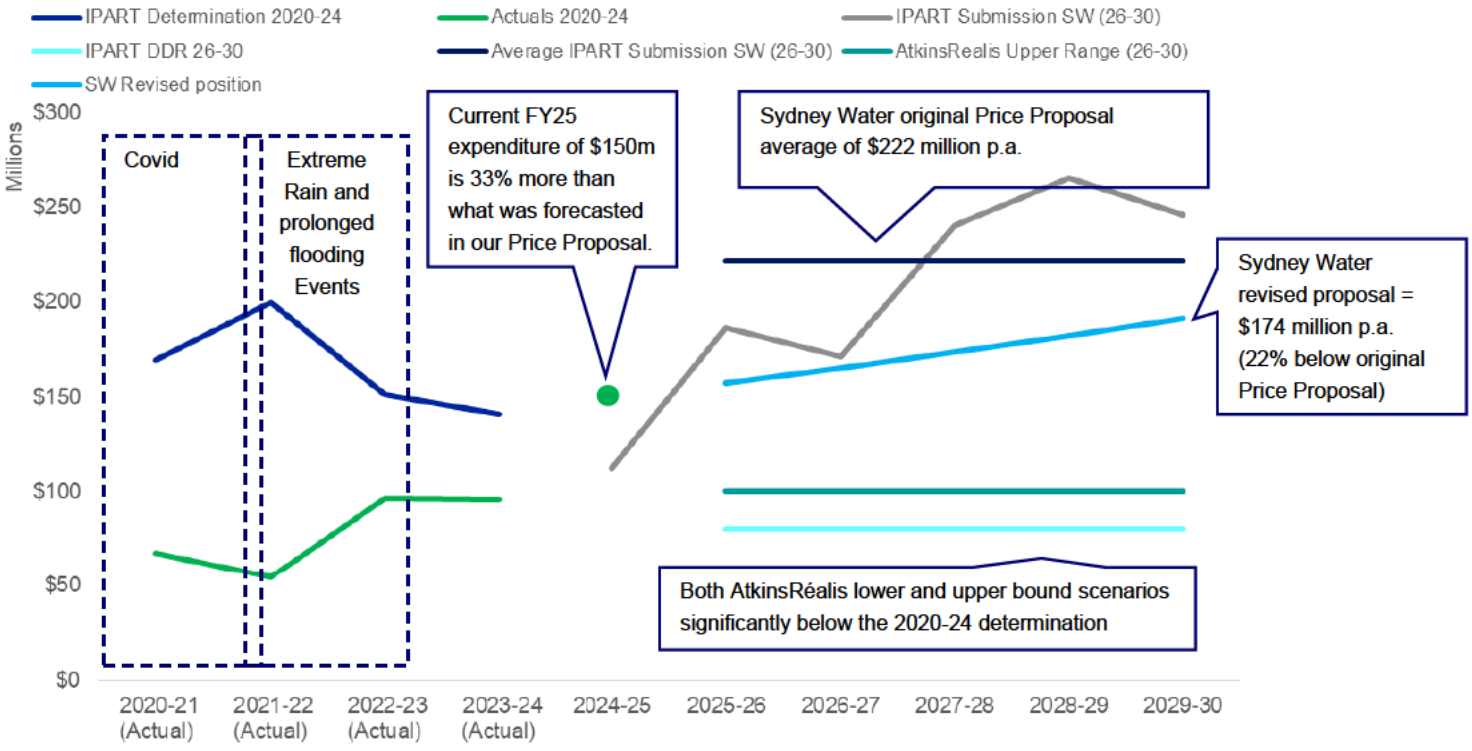
74 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 206.
75 Sydney Water Wastewater Network Renewals – Program Investment Plan p. 49

We request IPART to reconsider including the $470 million shortfall is well justified, prudent, deliverable, and in the best interest of customers.

To alleviate any ongoing concerns around rate of delivery being optimistic[76] (of which we do not agree is a prudent decision to materially reduce funding on these critical assets) we are taking on even more risk and proposing an investment level equivalent to what we delivered in the current financial year of $150 million with a very modest increase of 5% per annum after that. This is 22% below our original Price Proposal. This is also in line with what was determined in the 2020-24 determination.

The criticality and risk position has not changed since the 2020 determination. In fact, it has significantly worsened because of increased inflows across 2021 and 2022, accelerating deterioration of sections of critical sewers that were already failing. Proposing any scenario below what was deemed prudent in the 2020 is not in the long-term interests of our customers.

Figure A.2.22 Capital investment – Critical Sewer Renewals



As per the *sustaining capital renewals* program (below), **given our revised funding position is considerably below our original price submission, we strongly believe that we will have to overspend this proposed budget allocation to avoid significant failures and overflows.** This will create further customer bill pressure in the next determination period which we ask IPART to consider when finalising their determination.

76 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 206

2.6 Sustaining capital renewals

Sustaining capital renewals is essential to complying with operating and environmental protection licence requirements and maintaining expected services for our customers and communities.

Our approach to renewals is aligned to our customers' identified preferred approach to risk, taking a long term view, to ensure we adopt a medium to low-risk profile in the delivery of water and wastewater services[77] reflecting the expectations of our customers and our regulators. Capital renewals do this in the following ways:

Table A.2.12 Linking capital renewals to our customer outcomes

Customer Outcomes	How renewals link to customers objectives and regulatory expectations
Water Quality and Reliability	• **Safe and clean water**: Supply safe drinking water that meet Australian Drinking Water Guideline limits, linked to both our Filtration of source raw water and maintaining safe drinking water in our network infrastructure for customer consumption. • **Reliable water** to the customers property that enables the customer to access the drinking water supply, linked to network infrastructure including Water pumping stations and reservoirs.
Environmental protection	• **Prevent pollution:** Collection and transfer of waste product from customer properties to ensure public health sanitation needs are maintained through our networks, while reducing the occurrence of overflows to the environment, linked to the pipe and pumping station networks. • **Recovering Resources**: Treat wastewater product to a level that can be either recycled for customer and business use, or safely returned to the environment without impact on the local waterway ecology and public health from customer recreational use, linked to the Water Resource Recovery Facilities • **Cool Green and Natural places**: Are supported by delivering renewals for stormwater assets ensuring flooding is safely managed and stormwater is captured to providing recycled water to green and cool public spaces. We care for Country, and conserve and restore waterways and natural habitats.

An increasing number of assets are reaching end of life, are doing so for the first time, and require more complex renewal (e.g. obsolescence, escalating expectations for reliability & safety, heritage requirements). Age alone is not a trigger for renewal, and is considered as part of holistic renewal assessments along with asset performance and condition data, supporting the uplift in need and risk (as a cohort of assets reach end of life). In the context of increased growth, reliable assets and performance are key to both maintaining services and enabling growth for new customers.

We have made strong progress in the current period (2020-24) in prioritising and rectifying the asset failures from the previous period (2016-20). However, the challenge in increasing backlog and additional failures requires us to provide an appropriate level investment. **We also understand the cost of living pressures for our customers and so we have adopted a high-risk position, removing nearly half a billion dollars for our original position in our Price Proposal to offset a further $5 per annum to customer.**

Table A.2.13 provides a summary of our updated proposal for *Sustaining Capital Renewals*, complete with impact on customer bills, in comparison to our original Price Proposal and the IPART Draft Determination.

77 For further information, see Appendix 5: Key long-term planning choices and alignment with our 10-year plan of Sydney Water's Price Proposal.

Table A.2.13 Summary of proposed positions across sustaining capital renewals

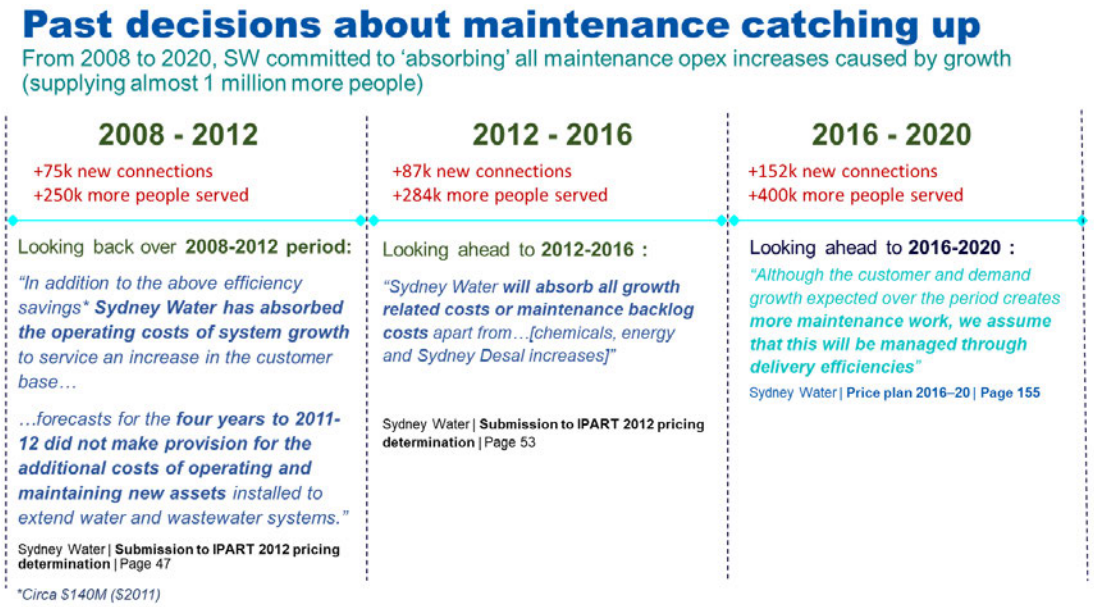
Renewal Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
Wastewater Pumping Stations	$236	$105	<1c per week	**$236**	<1c per week	We do not accept the proposed draft determination position.
Water Reservoirs	$306	$180	3c per week	**$306**	3c per week	We do not accept the draft determination position.
Water Filtration Plants	$274	$70	5c per week	**$200**	2c per week	We partially accept the draft determination position.
Wastewater Resource Recovery Facility	$1,255	$880	7c per week	**$1,025**	4c per week	We partially accept the draft determination position.
Stormwater	$280	$120	3c per week	**$200**	1c per week	We partially accept the draft determination position.
Property	$382	$270	3c per week	**$270**	-	We accept the draft determination position.
Water Network	$576	$576	-	**$576**	-	We accept the draft determination position.
Wastewater Network	$283	$283	-	**$283**	-	We accept the draft determination position.
TOTAL	**$3,592**	**$2,484**	21c per week	**$3,096**	11c per week	Our revised higher risk position is a $496 million (-14%) reduction to our original proposal

AtkinsRéalis and IPART have supported that our asset management systems have matured considerably since the last review and have deemed all maintenance and renewals expenditure across the 2020-24 period to be prudent and efficient.

Over the last four of five years, IPART deemed Sydney Water non-compliant to its Asset Management Systems (AMS) due to lack of maintenance and capital investment. This is in part is due to a history of absorbing maintenance and cost increases (**Figure A.2.23** below) with IPART quoted that "*Failure to fully implement its Asset Management System presents a high level of operational risk that Sydney Water may not be able to effectively manage the safe and reliable performance of its assets as required to meet its business objectives. Failure to effectively manage the assets may result in a failure to meet service performance standards and increased operational costs.*"[78]

78 Virdis (2025) 2024 Operational Audit of Sydney Water for the ndependent Pricing and Regulatory Tribunal (January 2025), p. 144

Figure A.2.23 history of absorbing maintenance Opex increases



During the 2020-24 period Sydney Water has developed a program of works including bottom-up maintenance and renewals budgets, and accelerating capital renewal works under our dedicated Service Excellence program to improve our compliance to Operating Licence requirements. Through this work, IPART have assessed that we were fully compliant as part of the 2024 Operational Audit. The auditors engaged by IPART found that *"Sydney Water explained and demonstrated ongoing improvements, including the timely delivery of all but one of twenty-two planned deliverables under the Service Excellence Road Map."*[79]

Sydney Water now has leading asset management practices among Australian water utilities, as recognised in the December 2024 Asset Management Customer Values (AMCV) benchmarking survey[80] run by the Water Services Association of Australia across 21 peers in the water industry. We are concerned the review has not fully acknowledged the reforms we have made and, as a result, has mischaracterised the rationale for our proposed expenditure programs.

Our maintenance and renewals expenditure submission are underpinned by this asset management approach, which has been independently audited[81] and found compliant with ISO standards. IPART and AtkinsRéalis have also concluded that our current period expenditure was prudent and efficient. The Draft Determination proposal to dramatically reduce both Maintenance and Renewal expenditure appears at odds with the last four years of work we have done with IPART to build a compliant AMS.

We are concerned that the proposed reduction in maintenance and renewals expenditure will lead to a failure to meet service performance standards, increase operating costs, and ultimately increase cost to customers in the long run.

In accordance with IPART's enforcement action (letter dated on 27 April 2023), IPART noted that Sydney Water's non-compliant finding with clause 5.5.2 in the 2020, 2021, 2022 and 2023 were due to an ongoing inability to complete identified asset maintenance and renewal tasks and they had concerns about a significant backlog of maintenance and renewals that needed to be undertaken. Further, IPART noted that it received comments from NSW Health raising concerns regarding our ability to address outstanding items with water filtration plants and network assets. We are concerned that asset backlog will grow to an unsustainable level with the draft determination result in serious asset failures, increased environmental harm incidents and water quality and supply issues.

We suggest—and believe our customers would agree—that cutting over $1 billion, or one-third, of the essential capital renewal works over the next five years, and accepting a higher risk of poor service outcomes is a not a reasonable trade-off for 21 cents per week in avoided costs."

AtkinsRéalis suggests our goal across most asset classes is to "*significantly*" reduce risk and increase levels of service performance. We reject this characterisation of our Price Proposal. **Sydney Water is not proposing or targeting a material change in risk**

79 Virdis (2025) 2024 Operational Audit of Sydney Water for the ndependent Pricing and Regulatory Tribunal (January 2025), p 82.
80 Asset Management Customer Value (AMCV) 2024 Benchmarking – Final Utility Report
81 BSI Assessment Report 2025

appetite or the levels of service outcomes for customers. Rather, our program is aimed at managing our current level of risk and sustaining our customer mandated service performance in line with our Operating Licence requirements. Consistent with our asset management approach, we only replace assets that have already failed too many times and have reached the point where it is more economical to replace the asset, to avoid further deterioration in assets and even worse service performance outcomes over the coming period. We do not simply replace assets because they are old, but consider factors such as the failure history, condition assessments and deterioration modelling.

As part the customer engagement this was tested with customers where:

"Customers were concerned that the current state is not acceptable, given EPA standards were being breached. However, customers were supportive of a medium-risk profile that would lead to about 90% of water resource recovery facilities (WRRFs) complying with key environmental performance standards (EPLs) within the next 5 years. Customers advocated strongly against activities that would increase the risk of poor performance….Customers are willing to pay more on their quarterly bills to see an increase in the number of healthy waterways above current levels."[82]

Customers identified their preferred risk settings over the longer term to ensure we adopt a medium to low-risk profile in the delivery of water and wastewater services.[83]

We note that the AtkinsRéalis report did not analyse our approach to forecasting asset deterioration in any detail, instead placing primary reliance on lag indicators such as historical average expenditure rates, work orders, and service outcomes. We have some concerns that AtkinsRéalis has taken a selective approach to the use of these indicators, downplaying the significance of data that shows a worsening trend in work orders or non-compliant levels of performance.

AtkinsRéalis have stated on multiple occasions in their report that the approach and justification for both their upper and lower ranges is arbitrarily based on "*…a top-down estimate. It is hard to know what the appropriate level of renewals is to maintain stable risk"* and highlights the challenge of investing to manage risk *"not all risks are visible from asset risk assessments and performance data*" but then make the unjustified claim that "*Average historical should reduce risk*"[84] *.*

We consider this approach is not a robust basis for recommending such large reductions in proposed expenditure, amounting to between nearly $800 million (22%) and $1.1 billion (31%) across the sustain capital renewals program.

As a practical matter, we are concerned we will not be able to sustain current levels of services in line with our operating licence requirements under the proposed expenditure allowances, let alone address existing areas of non-compliance.

We are concerned the recommended reductions by AtkinsRéalis have been arbitrarily determined based on historical expenditure, and providing a scaled back level of service is neither 'appropriate' nor 'reasonable'.

AtkinsRéalis themselves note the investment in their envelope will require "*scaled-back basic service levels and reformed operating environment (e.g. policy, legislative or regulatory changes)"*[85] It is clear that the reduced recommended funding levels will not be able to sustain current levels of services in line with our operating licence requirements (again including areas where we are currently non-compliant), and is a funding level that will require either changes of operating or environmental regulatory requirements (via IPART, NSW Health, NSW EPA and others) or a level of performance below current requirements.

We have provided clear evidence of why an increase in funding is required, built on strong asset management fundamentals, with significant impact to customer and the broader Sydney community from the resulting reductions.

Many of our assets have been 'sweated' far beyond their limits, with the consequent failures in some cases leading to prosecutions and other regulatory action by the EPA. This is evidenced in the increase in failure rates and non-compliance with Operating and Environmental Protection licence requirements. Our proposal uses asset condition and system performance information to forecast the required level of investment. For some asset classes, managing to the proposed reduced level of expenditure will increase

82 Sydney Water (2024) Pricing Proposal to IPART, p. 383
83 Sydney Water (2024) Pricing Proposal to IPART, p.382
84 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 204, 205, 227,230 & 236

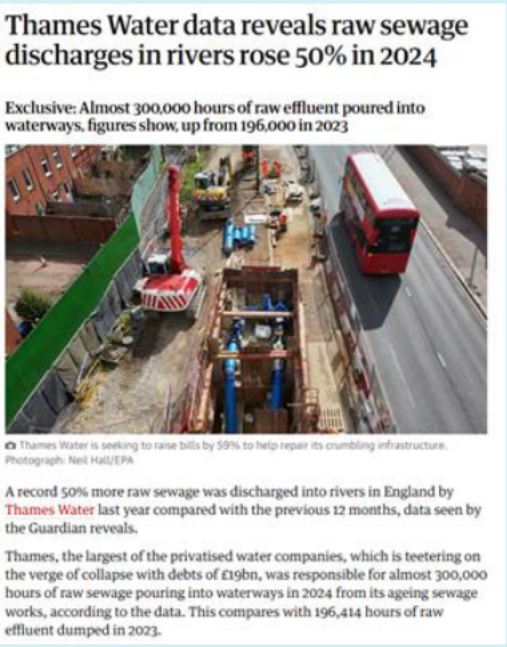
failure rates by up to 190 per cent, jeopardising reliable water supply and wastewater management and leading to unacceptable water supply service disruptions and increased environmental harm.

Sydney Water is concerned that the methodology adopted in the review incentivises a run-to-fail approach, where assets are not maintained or renewed appropriate to manage failures, resulting in more and costly reactive repairs and maintenance, and a decline in customer service outcomes.

With a deteriorating asset base, a backward-looking reactive approach materially increases risk to asset and service performance over time, as can be observed currently in other jurisdictions such as the UK. There is a risk of reaching a tipping point where it is not possible to recover performance without significant financial and customer impact. As an example, Thames Water (UK), a utility equivalent in size the Sydney Water, *"has admitted it has left its sewage treatment works to crumble for decades as a result of underinvestment. Its own business documents say it has "sweated these assets" by failing to invest in their upkeep, and as a result its infrastructure poses a risk to public safety, water supply and to the environment."* (see **Figure A.2.24**)

This is supported by the broader water industry with the Water Services Association of Australia's submission to IPART on NSW price determinations highlights the risks of this approach: *"The lesson for Australia from the UK is that kicking the investment can down the road is a failed strategy. It will lead to a decline in service levels and to an even greater level of investment and pricing increases to fix broken systems."* This cannot continue without significant risks to service levels for our current customers, to future generations' water needs and to the ability to sustainably provide this service.

The Guardian, 2025



Thames Water data reveals raw sewage discharges in rivers rose 50% in 2024

Exclusive: Almost 300,000 hours of raw effluent poured into waterways, figures show, up from 196,000 in 2023

Thames Water is seeking to raise bills by 59% to help repair its crumbling infrastructure. Photograph: Neil Hall/EPA

A record 50% more raw sewage was discharged into rivers in England by Thames Water last year compared with the previous 12 months, data seen by the Guardian reveals.

Thames, the largest of the privatised water companies, which is teetering on the verge of collapse with debts of £19bn, was responsible for almost 300,000 hours of raw sewage pouring into waterways in 2024 from its ageing sewage works, according to the data. This compares with 196,414 hours of raw effluent dumped in 2023.

Figure A.2.24 The implications of a run to fail asset management strategy

These proposed reductions will almost certainly result in further deterioration and worsening non-compliance of wastewater operating licence performance including Dry and Wet weather overflows, Sewerage Treatment System licence non-compliance, pollution and environmental harm incidents, load and concentration limit breaches, and non-compliant bypasses.

Water system performance will also be impacted including water leakage and water continuity (as we will have to re-prioritise water network investments) as well as putting compliance with ADWG from reduction in water filtration plant and reservoir renewals coinciding with the deferral of the pre-treatment program, and desal network expansion.

The methodology adopted by AtkinsRéalis, which relies on a 'top-down, reversion to average trend' model, appears to overlook critical contextual factors, particularly the type of renewals works and evolving composition of the forward capital works program relative to historical patterns. We cover this further as an example in the Water Filtration Plant renewals.

After several price reviews where a backward-looking approach has been applied to keep bills low, it has resulted in increase in failure rates, poorer customer performance, increase risk, and resulting non-compliance. Our 2025–30 Price Proposal applies a more appropriate detailed and forward looking, holistic approach to asset management that balances short-term and long-term outcomes to maintain the reliable delivery of services to our customers at an acceptable level of cost. This Asset Management approach has already been assessed by IPART as the appropriate way to manage assets.

Our investment decisions are focused on maintaining the required level of service, not enhancing it beyond what is mandated.

We are already taking considerable risk across the five asset classes with proposed reductions, and have deferred nearly $2.4 billion, nearly 50%, already in identified renewal works. We are also taking even higher risk position in the short term by deferring nearly 20% of identified high-risk projects across the next three years.

Our investment decisions are focused on maintaining the required level of service, not enhancing it beyond what is mandated. Sydney Water's investment approach is grounded in balancing cost to customer, performance, and risk to ensure compliance with our operating licence obligations.

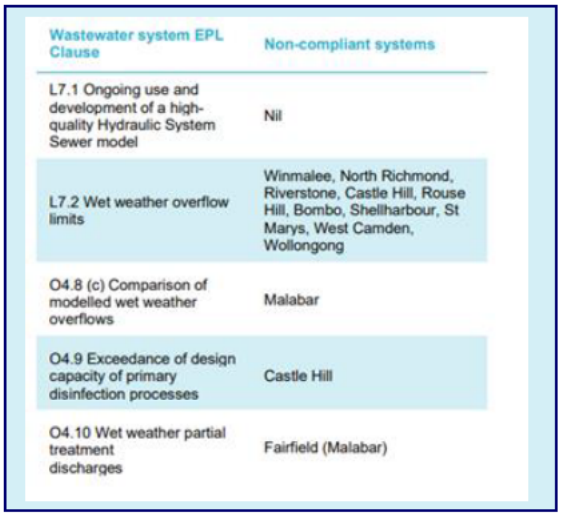
Our Service and Asset Performance and Risk Model is designed not to improve risk levels, but to sustain performance in accordance with regulatory requirements set by IPART, NSW Health, and the EPA. This approach reflects our established risk appetite which has not changed from previous IPART submissions. It also reflects our risk assessment framework, which has consistently been aligned with our operating licence obligations.

These risk thresholds (refer to **Figure** below) are a delicate balance of performance and cost, and at times, not investing enough or not taking enough of a proactive asset management approach in the past has resulted in non-compliances and material incidents, such as those experienced across some of our Water Resource Recovery Facilities (WRRFs), Wastewater Pumping Stations (WWPSs) and rising mains.

Additionally, the pressures of extreme weather and the additional demands this place on our existing aging assets contributed to conserve water alerts being issued at our Nepean and Orchard Hills Water supply customers during poor raw water quality events. Failures such as the Como Watermain failure (2025), North Ryde watermain failure (2024), Bombo Odour PRP, and other compliance challenges provide real world confirmation of our delicately balanced risk assessment.

Our Price Proposal outlines the funding needed to reduce risks and ensure the sustainability of our wastewater systems. Currently, 11 out of 24 wastewater systems are non-compliant[86], with five more trending toward failure.

We are committed to resolving these challenges and have developed an optimised plan and set out the investments needed to implement essential improvements.



Wastewater system EPL Clause	Non-compliant systems
L7.1 Ongoing use and development of a high-quality Hydraulic System Sewer model	Nil
L7.2 Wet weather overflow limits	Winmalee, North Richmond, Riverstone, Castle Hill, Rouse Hill, Bombo, Shellharbour, St Marys, West Camden, Wollongong
O4.8 (c) Comparison of modelled wet weather overflows	Malabar
O4.9 Exceedance of design capacity of primary disinfection processes	Castle Hill
O4.10 Wet weather partial treatment discharges	Fairfield (Malabar)

Figure A.2.25

List of Wet Weather Overflow non-compliances by EPL Clause, *Extract from Sydney Water Annual Environment Performance Report 2023-24 p.37*

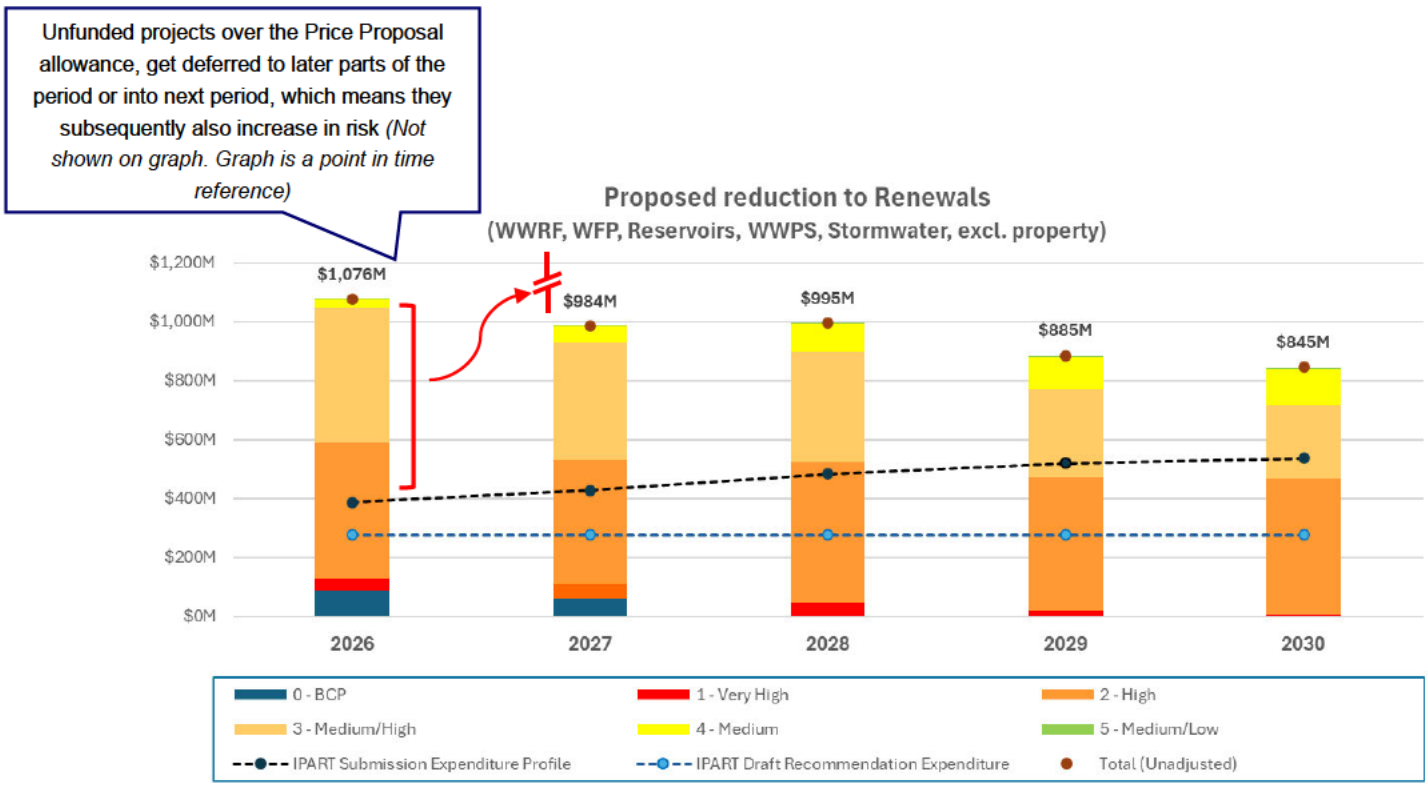
However, under the investment scenarios suggested by the AtkinsRéalis Review, our modelling shows that less than half of our Water Resource Recovery Facilities will be compliant by 2030.

Without this crucial funding, delaying renewals and reducing maintenance could result in more overflows and pollution, increasing the risk of not meeting environmental standards and potentially leading to beach and waterway closures.

Despite this, the draft determination proposes a further significant reduction in funding— an additional reduction of $970 million. This is well below the level required to manage current licence obligations (as noted by AtkinsRéalis pg. 15), with now a further 41% of asset needs now unfunded through renewals, placing additional pressure on maintenance (which has also been reduced), in a hope that we can '*survive*'[87] any adverse conditions or asset failure and still meet customer and regulatory outcomes.

86 Sydney Water (2024) *Annual Environment Performance Report 2023-24* p.37
87 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 218

Figure A.2.26 Proposed reduction to Renewals compared to current risk profile



Our Price Proposal provided an adequate balance between, performance, risk and cost for our customers, however, we are still proposing to reduce our renewal investment position by almost $500 million, when compared to the Price Proposal. By taking on even more risk, we are able to pass on 50%, or 10 cents, of the 21 cents a week of the bill reduction proposed by IPART to our customers.

We have reviewed each of the proposed positions by IPART and AtkinsRéalis and have reduced our proposed expenditure where we think we can compromise our funding position. We have reduced our proposed renewal funding position by $496 million across the 2025-30 period.

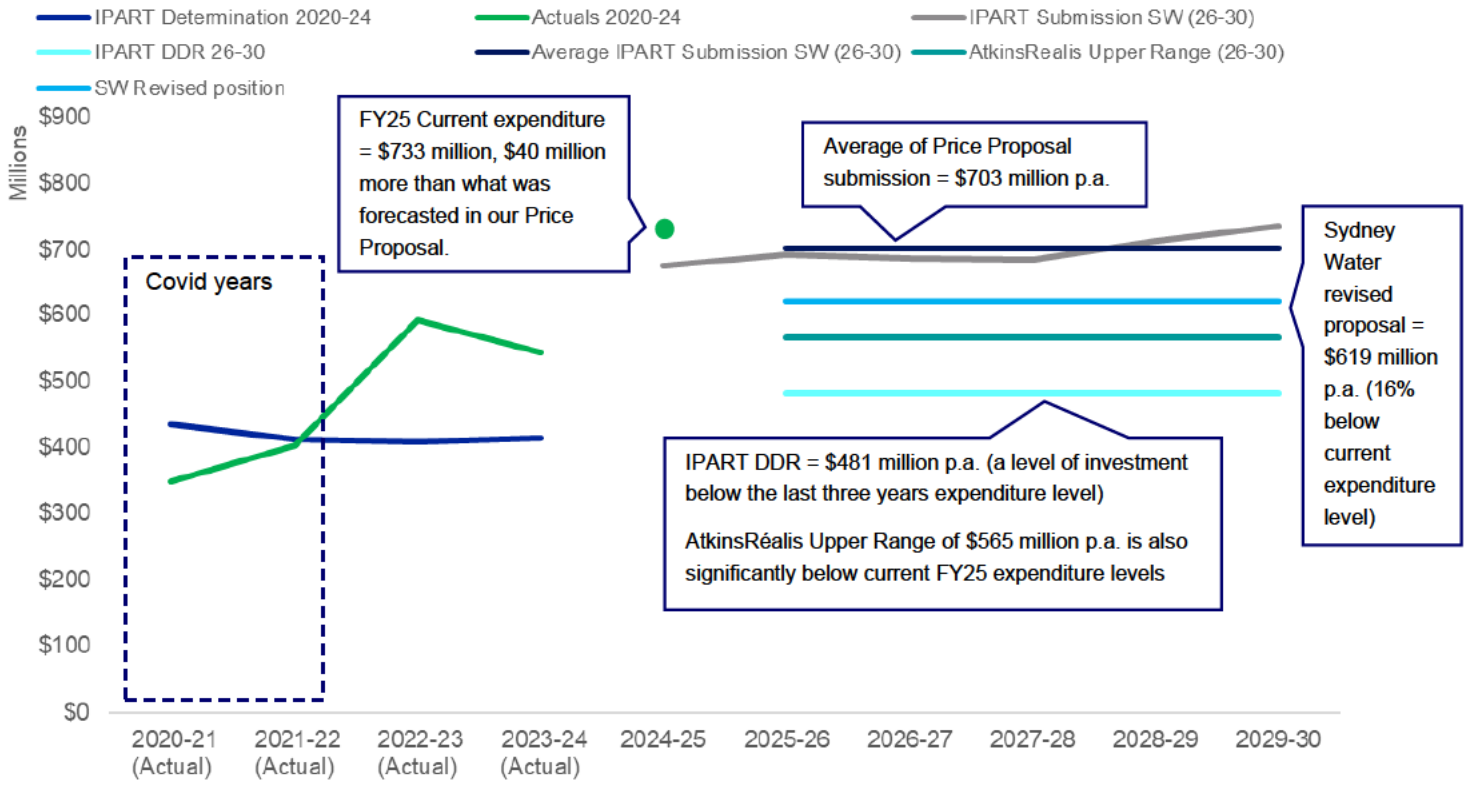
We believe the position taken by AtkinsRéalis by setting the basis from historical expenditure levels across the previous five years which included material constrained years impacted by Covid and record wet weather, and a period where we had increased failures and operating non-compliances, is not appropriate or sustainable.

The proposed reduced renewals expenditure lowers allowances for certain asset classes to levels last seen in the 2016–20 determination period, despite an increase in our customer base of more than 275,000 properties, a $7.4 billion expansion of our asset base, and significant increase in asset deterioration and failure rates experienced since that time.

Across these sustaining renewals programs our proposed expenditure for FY25 was $693 million, we are forecasting to spend to $733 million this financial year, $40 million more than originally proposed. The Draft Determination allowance of $619 million a year is $114 million or 16% below what we are currently required to invest to sustain performance and manage risk at current levels, and what was deemed in the current period to be prudent and efficient by the efficiency reviewers.[88] The comparison of the historical expenditure, Price Proposal, Draft Determination allowance and updated proposal is detailed in below

88 IPART (2025) *Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025*, p.59; AtkinsRéalis (2025) *IPART Sydney Water Expenditure review*, p.126.

Figure A.2.27 Sustaining Renewals – Price Proposal and proposed draft determination capital investment



We also note the above **does not include the 8% portfolio adjustment** we have applied across the entire capital infrastructure portfolio. This is a further reduction in funding of $248 million, placing additional pressure on Sydney Water to deliver efficient and reducing cost to customer further.

Given our revised funding position is below our current expenditure (deemed prudent and efficient by AtkinsRéalis and IPART) and our original price submission, **we strongly believe that we will have to overspend this proposed budget allocation to maintain operating requirements and meet customer expectations.** This will create further customer bill pressure in the next determination period which we ask IPART to consider when finalising their determination.

In the following sections, we provide further detail information and evidence across the five-asset class being proposed for funding reductions.

2.6.1 Wastewater Pumping Stations

The Wastewater Pumping Station Renewals Program seeks to meet our customers' needs by maintaining the assets that form part of the system that transfers sewage from homes and businesses across Greater Sydney each day to Water Resource Recovery Facilities for treatment before being used for recycled water needs or released to the environment.

Customers told us that they are supportive of a medium cost, risk and performance profile to prevent pollution, and want to see waterways, including beaches, rivers and creeks maintained in their current state or improved.[89].

We additionally shaped our pricing proposal to respond to our regulatory licence requirements set by the EPA, proposing $280 million of expenditure on capital renewals to maintain current service levels. With a proposed $175 million, 61% reduction in renewal expenditure, there is a far higher risk of our aging, obsolete and failing assets jeopardising the environment and waterways our customers live and play in.

89 Sydney Water (2024) Price Proposal 2025-30, p. 384.

These risks include:

- **Pollution and Environmental harm** – Material harm to flora, fauna and waterways
- **Public Health** - impact on customer and community properties through overland flow and via odour, as well as public amenities including swimming and fishing.
- **Operator safety** - injury/illness risks from electrical switchgear and chemical safety systems obsolete and not meeting current standards

Compliance with EPLs for Wastewater Pumping Stations has remained a challenge for the last three years, with gradual improvements with increased renewals and maintenance expenditure, but still falling short of regulatory standards.

Sydney Water has been non-compliant on Environmental Protection Licences *L1.4 – Dry Weather Overflows and L7.4 Wet Weather overflows to waterways* from Sewage Pumping Stations and wastewater systems for the last three years. While the number of non-compliant dry weather overflows have improved, we require both the maintenance and renewal expenditure put forward in our proposal to return to 100 per cent compliance.

As a result of Wastewater Pumping Station and Rising main failures occurring during the period, in 2023-24 the EPA required Sydney Water to commission an independent review of its standards, design and maintenance processes and delivery of works for the Integrated assets classes.

From this review Sydney Water committed to 11 improvement actions to be completed this period. These actions included the need for improvement to condition assessment procedures and implementation, that determine current station performance and timing of renewals.

Forecasted risk implications of reduced funding levels to Wastewater Pumping Stations

As a result of the proposed funding reduction, only the projects currently underway will be completed, with 26 high risk deferrals identified and there assoicated impacted waterways, leading to prosecutions and environmental / public health concerns, as pump stations are located near the lowest ground levels of the systems:

- Sydney Harbour / Parramatta River – 4 Stations $22 Million
- Hawkesbury / Nepean River – 7 Stations $22 Million
- Botany Bay / Georges River – 5 Stations $19 Million
- Worona River / Port Hacking – 3 stations $7 million
- Eastern sea board (Other) – 7 Stations $20 million

Even with the proposed AtkinsRéalis upper band scenario, only 5 additional stations from the above would be included.

Obsolete mechanical and electrical parts have also increased the need for larger SPS upgrade renewal and/or modifications, with 15 stations in the deferral list also needing electrical upgrades with links to bringing equipment to current standards for safety reasons.

Importantly, the 700 Pump stations across the networks are not uniform in size or equipment. Small stations may have parts available “off the shelf” allowing a ‘Run to Fail’ program to be undertaken, however medium to large stations have pump, motors, drivers etc, that are bespoke and take time to manufacture. For these assets proactive identification through condition assessments of ‘end of service life’ enables Sydney Water to procure long lead time manufacture of parts before a failure impacting customer service or causing environmental harm occurs.

Figure A.2.28 Case study on prosecutions linked to failure of these assets

Prosecutions and other regulatory actions

Failure of these assets have already resulted in prosecutions and other regulatory actions. Examples include:

- Carramar – dry weather overflow on January 2019; Sydney Water convicted of polluting waterways with a $200,000 fine issued in February 2023
- Northmead – pump wall failure leading to overflow to the Parramatta River – October 2018; 2 convictions against the POEA Act with a $200,000 fine issued March 21.
- Sydney Water reported an additional 6 incidents to the EPA that had potential or actual material harm to the environment. One is still open for ongoing action under the POEA Act.

Source: ABC news, March 2021: Sydney Water fined close to $200,000 for release of raw sewage into Parramatta River - ABC News

These events and the Northmead Sewer Pumping station failure led Sydney Water to undertake a comprehensive audit and investigation of the same type of pump station configuration across our networks to assess likelihood of additional failures with associated capital projects required to be completed across 2025-30 to reduce the risk of these events happening in the future.

Given the proposed material reduction to the Wastewater pumping station (and critical sewers) renewals and maintenance programs, these critical projects are now at significant risk of being required to be deferred result in increase risk of these events occurring in the future.

We are concerned with the basis of AtkinsRéalis assumptions underpinning the reduced funding scenarios.

AtkinsRéalis lower range (adopted for the IPART Draft Determination) proposed average expenditure is based on the 2-year average spend from FY21-22, this was during the peak Covid lock down period, in a constrained environment where many infrastructure projects were impacted by labour and material shortage. We consider it inappropriate to use the lowest average spend during peak Covid period, and then using this number to extrapolate to a full 5-year expenditure. There is no consideration of performance or risk implications of this assumption, given during this period we have been non-complaint on Dry weather overflows.

Additionally, the AtkinsRéalis upper scenario proposed using the average spend ($30 million p.a.) across 2020-21 to 2023-24. As with the lower range, this does not consider the increased backlog, failure rates and deteriorate condition of sewer pumping stations and rising mains, and associated licence non-compliance, and subsequent environmental damage that has resulted in the current period from this level of investment and is therefore not a sustainable level of investment.

Both these scenarios (average of $30 million a year or $21 million a year) are set below what was determined to be an efficient and prudent level of required investment across the 2020-24 period of $39 million a year. Given the subsequent pumping station and

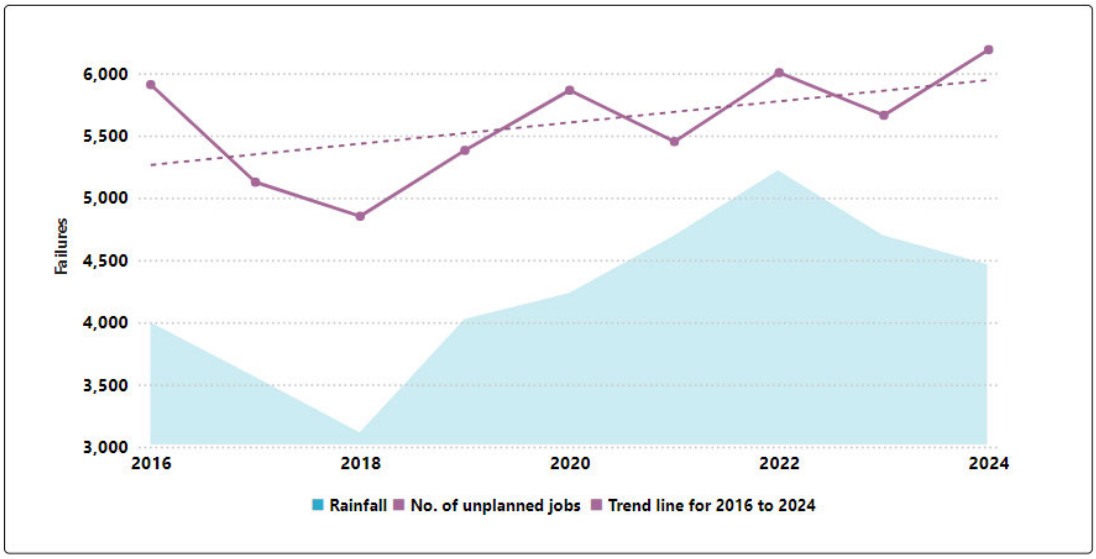
rising main failures, performance non-compliance, court hearings and prosecutions during the period, we do not understand how a level of investment below the current period is appropriate.

> AtkinsRéalis also caveats the associated risks of both these reduced expenditure scenarios by stating *"DWOs [Dry Weather Overflows] have been increasing. Not all risks are visible from asset risk assessments and performance data"* and "*This is only an estimate. It is hard to know what the appropriate level of renewals is to maintain stable risk"* (*pg. 205 version 4.0)*

This approach significantly under-estimates the investment required to meet operating licence requirements and protect the environment and public from dry weather overflows where we have been non-compliant the last three years. **16%** of the asset profile across **700** wastewater pumping stations are in poor condition, with the stations continuing to deteriorate if a run to fail approach is adopted across the asset base and assets become obsolete without renewals to maintain performance and comply with EPL obligations. We have been required to increase both maintenance and renewal expenditure to address this within the submission.

Sewer pumping station failure rates are increasing including electrical, pump and motor outages many of which are obsolete with limited or no spares available, impacting on the operability of the stations. In some cases, electrical assets need to be replaced with modern equivalents for safety reasons.

Figure A.2.29: Wastewater pumping stations – asset failures and unplanned jobs



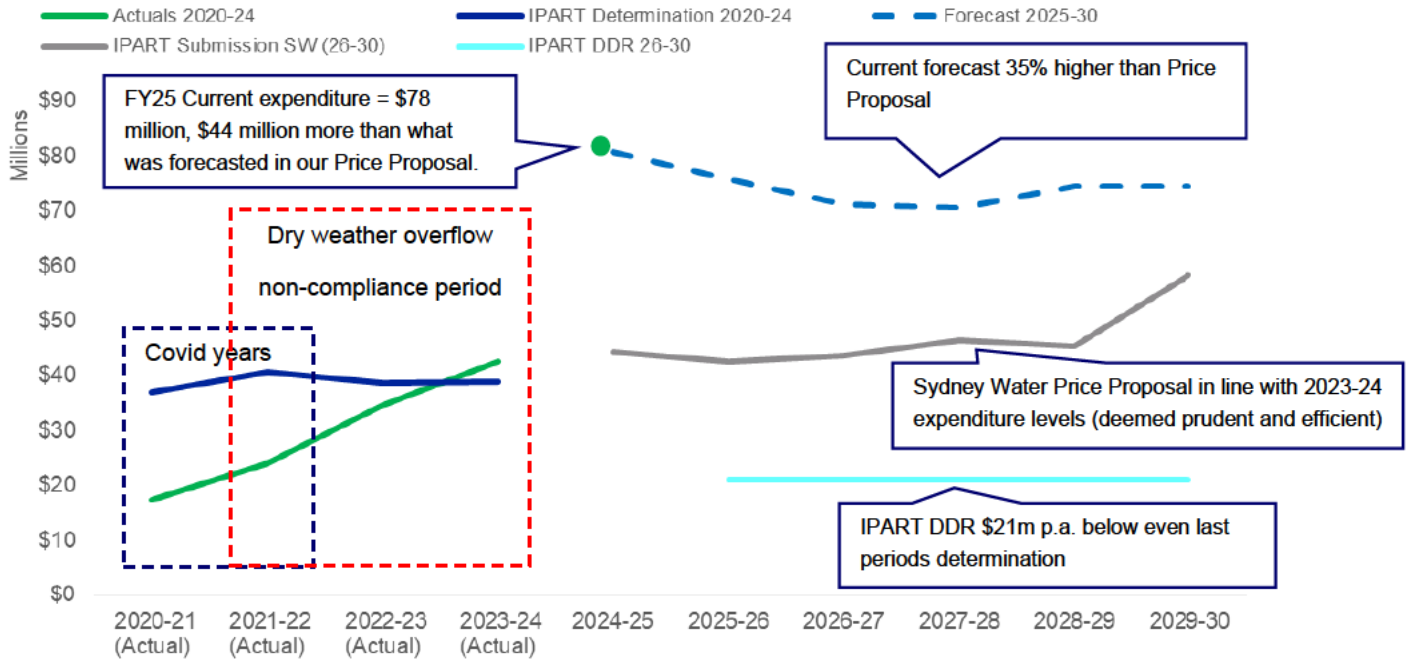
We propose that the original submission expenditure of $236 million is maintained

We encourage IPART to maintain the proposed renewal capital investment of $236 million on Wastewater Pumping Stations initiative over 2025-30 to meet licence obligations in providing reliable wastewater services and protecting the environment.

Sydney Water has been required to dramatically increase investment and has ramped up the delivery of wastewater pumping station renewals to address the non-compliance and poor asset performance, as seen where the spend for the current year 2024-25 is expected to be $81 million almost double our proposed $44 million, and almost four times IPARTs draft determination of $21 million p.a.

We are already taking significant risk in the upcoming 2025-30 period by adjusting our submission by over 35% or $35 million p.a. from current forecasted $73 million p.a. required levels of investment.

Figure A.2.30: Wastewater pumping stations – Price Proposal and proposed draft determination capital investment



2.6.2 Water Reservoirs renewals

Water reservoirs are a critical component and form part of the multi layers of assurance in maintaining water quality of drinking water supplied for consumption and health reasons between the Water Filtration Plants and the customer tap. This is primarily achieved through protective roofs and liners which isolate drinking water from any contamination from the outside environment, plus monitoring and disinfection assets to detect and treat any changes in water quality.

We heard clearly from our customers that maintaining safe, clean supply of drinking water, was their highest priority.

By deferring reservoir renewals investment by over 40% we expect that failure rates will increase by 150%, significantly increasing water quality and water security risk to the public. This will result in 9% year on year increase in total maintenance effort plus and additional estimated $67 million in Opex maintenance funding required to maintain the assets if renewals do not go ahead this period. (Refer Attachment 1: Opex – maintenance section).

Currently 18% of the 253 water reservoir assets are operating beyond their predicted useful service life. This results in repeat failures of key assets within the reservoirs including roofs, valves, pipe works, and vents, that are key to the supply of safe water to nearly 342,000 direct customers.

Forecasted risk implications of reduced funding levels to Reservoirs

As a result of the proposed funding reduction, nine projects currently underway will be completed, plus an additional seven high risk. An additional 15 high risk potential renewals will be deferred impacting five of Sydney Waters network systems, including some single source systems where there is no ability to cross-connect with adjoining zones. The impact of these deferrals will increase the likelihood of water contamination through foreign matter ingress and the potential for customers to get ill from dirty water and ensure water availability for emergency services use. Examples of systems and direct impacted numbers of people are listed below:

- Prospect North System – 4 renewals, $64 million, people impacted 210,000
- Nepean System – Single Supply Source - 2 Renewals, $27 million, people impacted 6,500
- Illawarra Supply – Single Supply Source system – 3 Renewals, $3 million, people impacted 21,000
- Ryde System – 3 renewals, $39 million, people impacted 41,000
- Orchard Hills System – 1 Renewal, $6 million, people impacted 64,000

Failure of a reservoir will impact Operating Licence conditions on Water Quality, which we were found to be non-compliant for 3 years during the current period relating to asset management and maintenance activities. Actions were raised to resolve these issues and Sydney Water was awarded a compliant rating in the 2024 review. Additional impacts include:

- Reservoirs with poor structural condition will degrade faster due to exposure to environment, and without adequate investment, more corrosion /crackling /spalling is expected, which will create more reactive maintenance and emergency repairs which can be 2-3x more expensive than normal planned maintenance.
- Deferred reservoir projects will lead to more renewal projects clustering together in the future, straining delivery capability, increasing cost and straining redundancy in the water network, and when combined with higher reactive maintenance that may lead to reservoirs being taken offline for emergency repair, water supply security is compromised as the risk of overlapping water supply outages become more likely.
- Access issues for workers will increase, impacting where access for manual chlorination is no longer possible or safe.

Additionally, an unreliable supply of water within the networks, dependant on reservoir storage availability, would compromise the ability for emergency services (Fire and Rescue NSW, Rural Fire Service, SES NSW) to respond to emergencies.

There exists a significant backlog in reservoir renewals and an increased number of aging reservoirs that are failing and requiring renewal now.

We delivered only 23% of the intended reservoir renewal works between 2020-24, largely due to the inability of accessing specialist divers during the lockout of NSW during covid which constrained our ability to define a clear scope of work for delivery in the remainder of the period.

We have been delivering around $55 million a year over the last three year to sustain reservoirs, which does not cover the existing backlog and means that asset condition has not improved since 2020.[90]

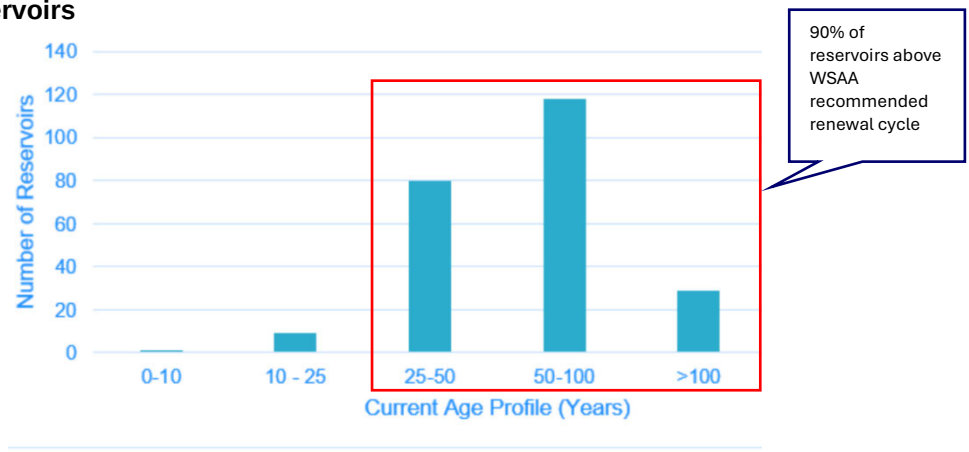
Currently there are 12 reservoirs that have a restriction that impacts the accessibility of the roof but have not yet been initiated as projects for roof renewal. Each of these 12 reservoirs are at risk of failing in a similar way as the North Richmond reservoir that is currently nearing completion of emergency repairs. Reducing the funding allocation does not recognise the real need to clear this backlog and enable planning for future renewal requirements.

Reservoirs in critical need of renewal will further deteriorate resulting in increased safety issues for workers and increased risk of water supply certainty and quality.

90 Sydney Water (2024) Water Networks Renewals Program Investment Plan, p.38

Water Services Association of Australia (WSAA) recommends a renewal cycle for major reservoir components of 25–35 years. Over 230 of our Reservoirs are beyond this recommend renewal cycle, with our renewals program only including 14 to 20 critical roof renewals and wall relining.

Figure A.2.32 Age of reservoirs



The majority of recent reservoir renewal works have focused on roof replacements and internal relining, driven by the need to address legacy design issues and improve long-term asset reliability, noting older reservoirs were constructed using materials and methods that have proven to be highly susceptible to corrosion and degradation, including Mild steel rafters and purlins, which corrode rapidly in humid, chlorinated environments, minimal ventilation, leading to trapped moisture and accelerated corrosion, and internal bitumen linings, which have shown poor long-term performance and adhesion.

These historical reservoirs designs have led to premature deterioration, increased maintenance costs, and reduced service life of critical infrastructure. Recent reservoir designs have incorporated significant advancements to address these issues and enhance durability, including structural upgrades, dosing system improvements, enhanced ventilation, and superior lining materials. The shift to modern materials and design practices not only extends the service life of reservoirs but also reduces long-term maintenance costs and improves water quality outcomes.

Increased investment in renewals is essential to:

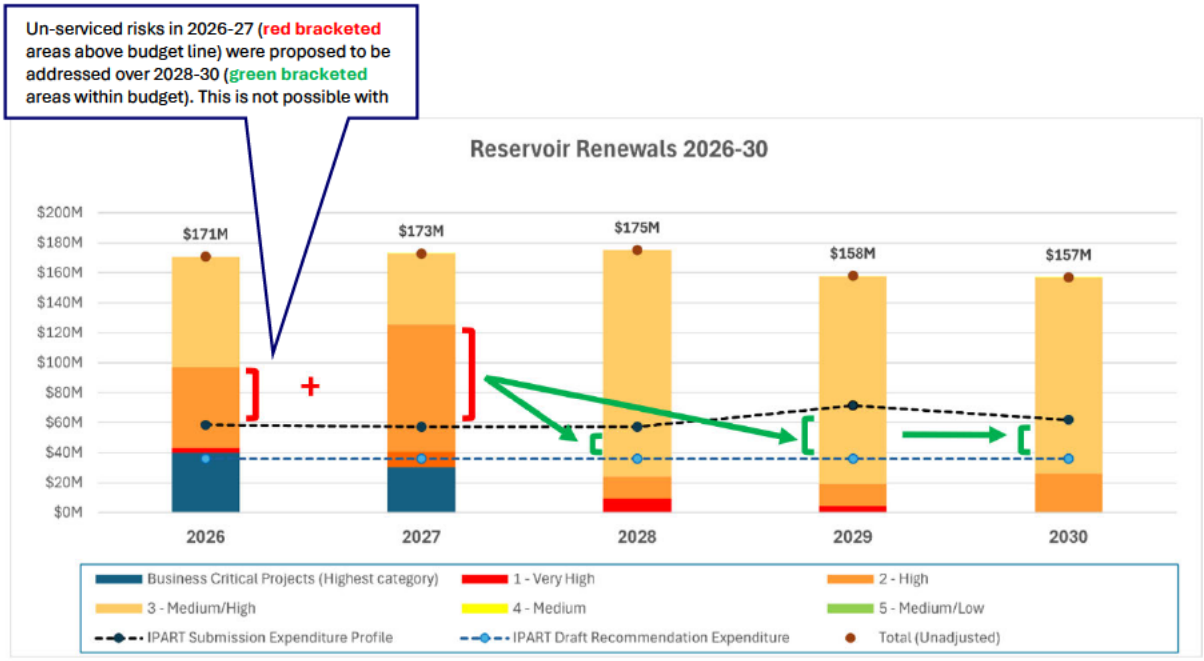
- Replace aging infrastructure before failure.
- Align with current engineering standards and WHS requirements.
- Ensure continued reliability of drinking water supply assets.

Sydney Water has already heavily reduced the Reservoir program scope and expenditure with consideration of cost to customers, deliverability, uncertainty and taking risk in operations while managing unacceptable risks to customers. It is important to note:

1. The cost of addressing the levels of at-risk reservoirs (shown by different colours on the bars in Figure A.2.23) is on the same scale as the requested Expenditure (dotted lines) on the graph to show there is already a significant reduction in funding for Reservoir renewals which Sydney Water will manage for customers.
2. We intended to manage un-serviced High 2 Risks in 2026 – 2027 which are above the budget (**Red Bracketed** area above the budget line) through deferral and staggered delivery over 2028 - 2030 (**Green Bracketed** area below the budget line), with High 3 Risks deferred and monitored for action.

The Draft Determination proposes reduced expenditure which will not leave sufficient budget to address the known High 2 risk Reservoir projects. This leaves a large number of unresolved High 2 Risk works to further deteriorate and risks impacts to customers water security and quality as detailed above.

Figure A.2.33 Proposed reduction to Renewals compared to current risk profile



The Draft Determination proposes reduced expenditure which will not leave sufficient budget to address the known High 2 risk Reservoir projects. This leaves a large number of unresolved High 2 Risk works to further deteriorate and risks impacts to customers water security and quality as detailed above.

We are concerned that AtkinsRéalis propose a 30 to 40% reduction on reservoir renewals that they at the same time heavily caveat the justification and the associated impact on risk.

Both AtkinsRéalis proposed upper and lower range reductions highlight that:

- *"Not all risks are visible from asset risk assessments and performance data. This may especially be the case with civil structures which make up a significant part of reservoirs"* and
- *"The [additional] 20% reduction is only a top down estimate. It is hard to know what the appropriate level of renewals is to maintain stable risk"*

AtkinsRéalis also notes that "*For water reservoirs the proposed expenditure appears to be approximately sufficient to renew all 'very high' and some 'high 2' assets in period to FY30"* We do not agree with this conclusion, as demonstrated in A.2.23Figure A.2.30 above . The requested budget amount is $306 million across the period, whereas the sum of business critical projects, and very-high and high-risk related asset projects is $613 million, a risk taking position by Sydney Water of 50%.

We do not believe that setting a lower allocation purely based on average historical spend (which included covid years and significant wet weather delays), whilst at the same time stating that they don't know what level of renewal is required to maintain stable risk, is not appropriate or reasonable.

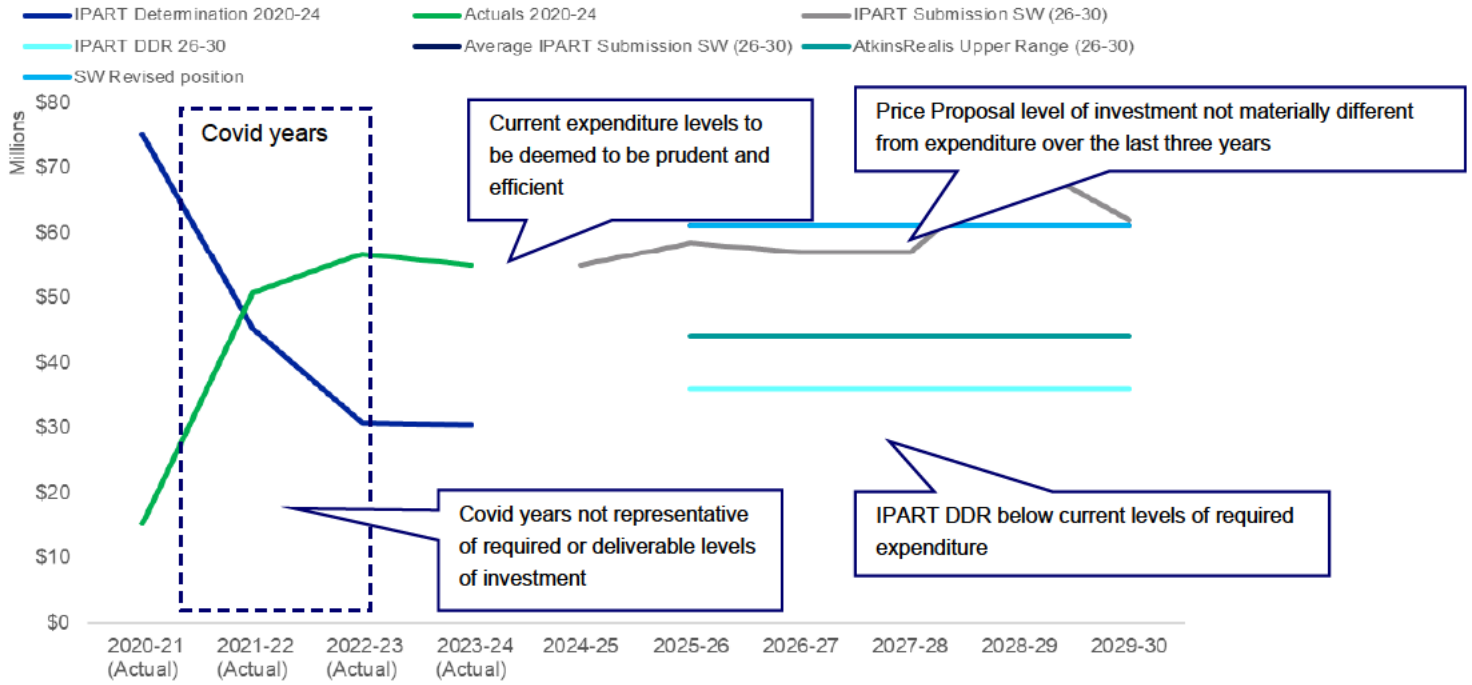
We propose that the original submission expenditure of $306 million is maintained

We encourage IPART to maintain the proposed renewal capital investment of $306 million (average of $61 million a year) on Water Reservoir renewal initiative over 2025-30 to manage the supply of safe and clean drinking water to over 3 million customers, which is very close to current expenditure of $55 million a year over the last three years.

We have already made considerable adjustments of over $566 million (a 63% reduction across the period) from the identified $897 million of required reservoir renewals works to balance risk with cost to customers. We have already adjusted to a point where over the five-year period, the total value of Very High- and High-risk projects exceeds the total requested budget. Our proposal only focuses on those assets that are assessed as high risk[91]to our customers.

91 Sydney Water (2024) Water Networks Renewals Program Investment Plan 2025, pg.53-54

Figure A.2.34 Water Reservoirs – Price Proposal and proposed draft determination capital investment



2.6.3 Water Filtration Plants renewals

The Water Filtration Renewals Program seeks to fulfill our customers' need for safe and clean drinking water for 5.3 million people across Greater Sydney each day, by maintaining of these critical assets.

Quality drinking water is a central part for Sydney's economy and productivity. It is used for consumption, health care, industrial use, food, hygiene, emergency services, recreation, wastewater services and sanitisation. Compromised quality and quantity of drinking water will have a direct impact to our customers.

With a proposed $204 million, 75% reduction in renewal expenditure, there is a far higher risk of our aging and failing assets jeopardising the clean and safe drinking water services our customers expect. These risks include:

- **Public Health risks** - production of water outside of Australian Drinking Water Guidelines, or loss of water supply to the community.
- **Compliance risk** - Service interruptions for customers contrary to our Operating License.
- **Operator safety risks** - injury/illness risks from electrical switchgear and chemical safety systems and others.

With the proposed reduction in investment in the Draft Determination, failure rates are expected to increase by 190% compared to the current baseline. This is estimated to result in 6% year on year increase in total maintenance effort (which has also had the proposed funding increase declined) and likely realisation of the above risks for customers across Sydney and the Illawarra.

Water filtration plant investment has historically been very low. Over the last decade we have operated the assets to maximise their full useful life but we have reached a point where repeat failures are now on an unsustainable increasing trend.

Currently 10% of our water filtration plant assets are operating beyond their predicted useful life. This results in repeat failures of critical process units including filters and chemical dosing systems that are key to supply of safe water.

The proposed material reduction in renewals investment will result in Sydney Water customers relying on older assets with higher failure risks. We cannot guarantee that water quality limits can be met if these levels of expenditure are maintained.

Water quality and supply risk is compounding during peak weather events (e.g. drought / extreme wet weather). When coupled with renewal reductions in other water system assets (reservoirs and pre-treatment expenditure), there are too many pressures stacked on our aging assets which will result in performance deterioration.

While we have managed most of the risks to maintain stable performance and a compliant water supply (apart from two incidents at Nepean and Orchard Hills, where customers were asked to conserve water use due to risk in filtration capacity), we however cannot foresee being able to continue to manage these risks with a 74% reduction in our proposed renewals.

AtkinsRéalis propose significant reductions between 50% and 74% on Water filtration Plant renewals but acknowledge they have no clear risk/performance basis for doing so.

As per the other proposed reductions, AtkinsRéalis again caution the associated risk of doing so by stating *"This is only an estimate. It is hard to know what the appropriate level of renewals is to maintain stable risk. Not all risks are visible from asset risk assessments and performance data."* and even acknowledge that based on our evidence that the "*Risk position of assets may deteriorate over time based on the business's modelling"*[92]

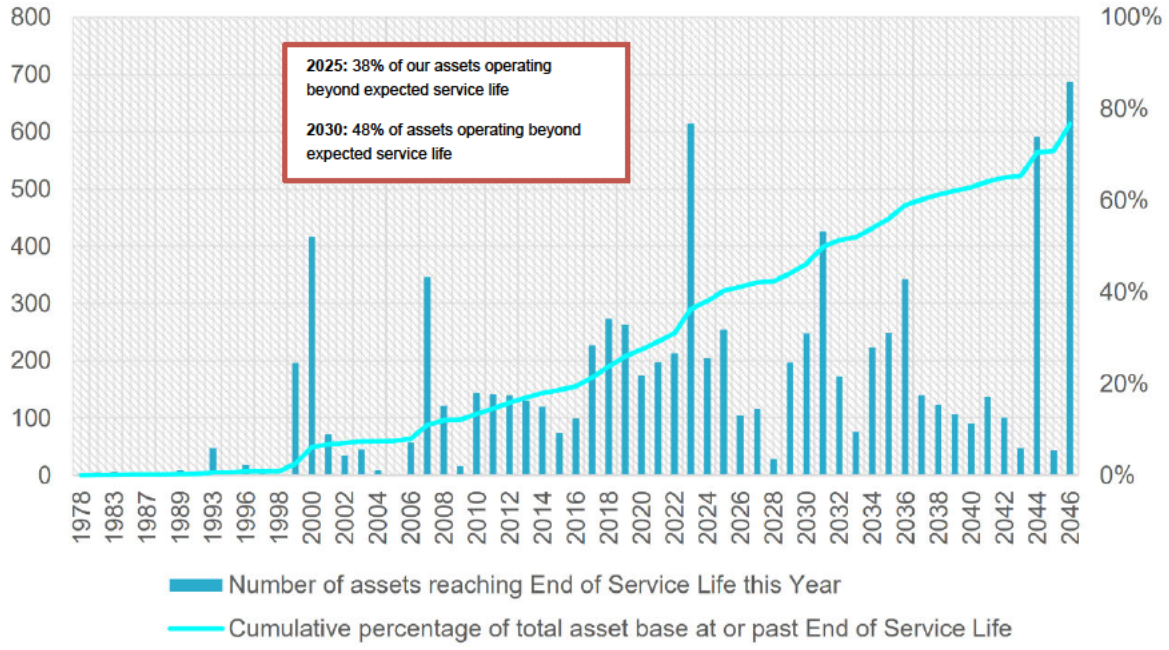
Asset conditions have deteriorated, with failure rates continuing to increase, requiring Sydney Water to respond with increased maintenance and renewal investment.

During 2020-24 we invested more on our WFP renewals to address increasing failure rates driven by ageing and deteriorating assets. We also invested in interim measures to manage the risks of poor water quality events, whilst we progressed the pretreatment program (refer to Section 21.4). This resulted in $53 million of additional expenditure (+250% increase)[93] above the 2020 determination of $15 million, which was found to be justified by IPART in its Draft Determination[94]. In the current 2024-25 we are already spending $32 million[95], again deem prudent and efficient, which is nearly half of what the allowance proposed is across the next five years.

These increases reflect that sustaining historic levels of expenditure alone are not enough to manage the compounding impacts on WFP infrastructure where poor raw water quality and asset failures are increasing.

Whilst AtkinsRéalis theorise[96] that *"asset lives are not generally a reliable basis for projecting renewals need"* in there justification for proposing reduced expenditure scenarios, they have not referred to the increasing trend of corresponding asset failures which they do note in their report as "*This suggests generally increasing unplanned jobs over time."*[97] Which coincides with an ageing asset base that requires more replacement expected to double by 2030 from 10% to 20%.

Figure A.2.35 The number of WFP assets operating beyond expected service life is increasing

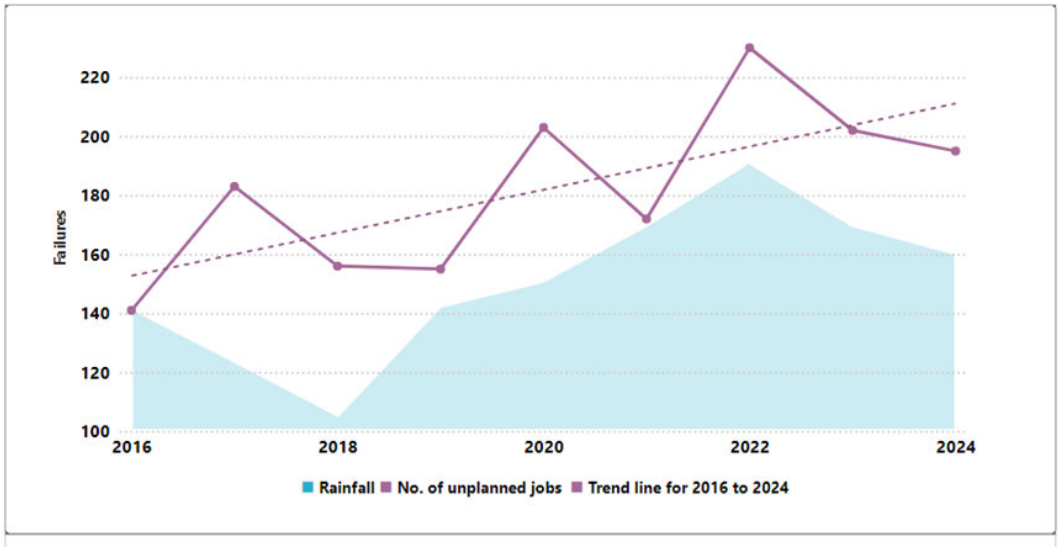


92 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 227
93 Sydney Water (2024) Water Filtration Plant Renewals Program Investment Plan, p.28
94 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025 p. 59
95 Sydney Water (2024) Request for Information 178, AtkinsRéalis efficiency review
96 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, p. 213
97 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 210

Allowing our assets to fail before we renew puts at risk the clean and safe drinking water our customers have asked for and is not aligned with our Operating License requirement to appropriately maintain our assets to enable service.

We have also provided evidence on deteriorating asset condition across WFPs[98] that was not included in AtkinsRéalis report, highlighting the net condition of WFPs has not significantly improved since 2021-22, requiring significant investment.

Figure A.2.36: Increase trend of failure The number of failing assets operating beyond expected service life is increasing



We have a well-defined major program of WFP capital renewal works which AtkinsRéalis did not appear to review in detail and may not have fully considered in their high-level analysis.

The methodology adopted by AtkinsRéalis, which relies on a 'top-down, reversion to average trend' model, appears to overlook critical contextual factors, particularly the type of renewals works and evolving composition of the forward capital works program relative to historical patterns.

Specifically, the current program includes substantial major projects that are designed to address multiple critical issues at individual WFP sites. These are not indicative of a generalised increase in high-volume, low-complexity renewals from a previously lower-cost baseline. Rather, they represent targeted responses to complex, compounded infrastructure challenges at locations with limited redundancy or alternative service options.

This distinction is significant, as it underscores the need for a more nuanced forecasting approach—one that accounts for the specific nature and importance of upcoming capital works, rather than relying solely on historical averages.

In the current 2024-25 year alone, we are already spending $32 million[99], which is nearly half of what the total proposed allowance, in the Draft Determination, is for the whole of the five-year 2025-30 period. The fact that the capital works we are now delivering are deemed prudent and efficient[100], and we have other critical programs of work in developments (**refer section below**), which does not seem to have been reflected in the proposed AtkinsRéalis reductions and summary level analysis, **noting under the proposed upper and lower bound, we estimate 11 major projects currently in delivery would be required to be discontinued .**

Forecasted risk implications of reduced funding levels to Water Filtration Plants

As a result of the proposed funding reduction, only five projects currently underway can be completed, plus an additional two high risk projects. An additional six critical renewals will be deferred impacting three of Sydney Waters Filtration Plants where customers are dependent on limited source supplies and/or with no ability to cross connect with adjoining zones.

98 Sydney Water (2024) *WFP renewals program investment plan 2025*, Table 13 and Table 14 p.34
99 Sydney Water (2024) Request for Information 178, AtkinsRéalis *efficiency* review
100 IPART (2025) Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025, p. 59

The impact of these deferrals will increase the likelihood of failures in our systems impacting customer service levels. Example of plant project impacts and numbers of people serviced are listed below:

- **Cascade** – people impacted 59,000, 4 renewals including filters and pumps at $2.5 million, plus 2 renewal candidates for the Lime and Non-Ploymer process components at $6.4 Million.
- **Nepean** – people impacted 29,000, 1 Renewal for transfer pumps and variable speed drivers, $8.4 million, plus 4 candidates for media filter and pipework replacements at $3.6 Million.
- **North Richmond** – people impacted 51,000, 1 Renewal Electrical upgrade, $3 million, plus 6 candidate filter replacements at $6.9 million.

There is also no allowance for any additional projects, with uncertainty around how we would have any opportunity to fund any new regulatory compliance requirements such as for PFAS or Workplace Exposure Standards and ensuring emerging electrical renewals and managing ARC flash safety risks are completed which cannot be managed through OPEX alone.

The vast majority of projects are addressing risks which cannot be alternatively addressed with increased maintenance, such as old and outdated electrical asset renewals which need replacement to meet current statutory obligations. It is not viable to increase reliance on short-term operational interventions (e.g. manual filter to waste, temporary manual dosing, exceptional jar testing during wet weather events, deploying personnel to site for continuous operation in extreme weather, or usage of Conserve or Boil Water Notices). Where these reach their limit, there are very limited or no alternatives for supplying water to customers (water trucks or bottled water are an inefficient and costly way to transport water).

Chemicals of Concern (e.g PFAS) rely on existing WFP processes to be operating efficiently, to assist newer technologies to remove PFAS. For example, existing gravity filters with granular activated carbon to remove dissolved organic carbon before the PFAS can be removed. Pre-treatment upgrades also rely on existing assets to reliably operate.

In acknowledgement of the need to balance Customers' expectations that Sydney Water to consistently providing access to safe, clean water[101], with further affordability considerations, we propose a reduced expenditure of $40m p.a. to help reduce customer prices, noting that:

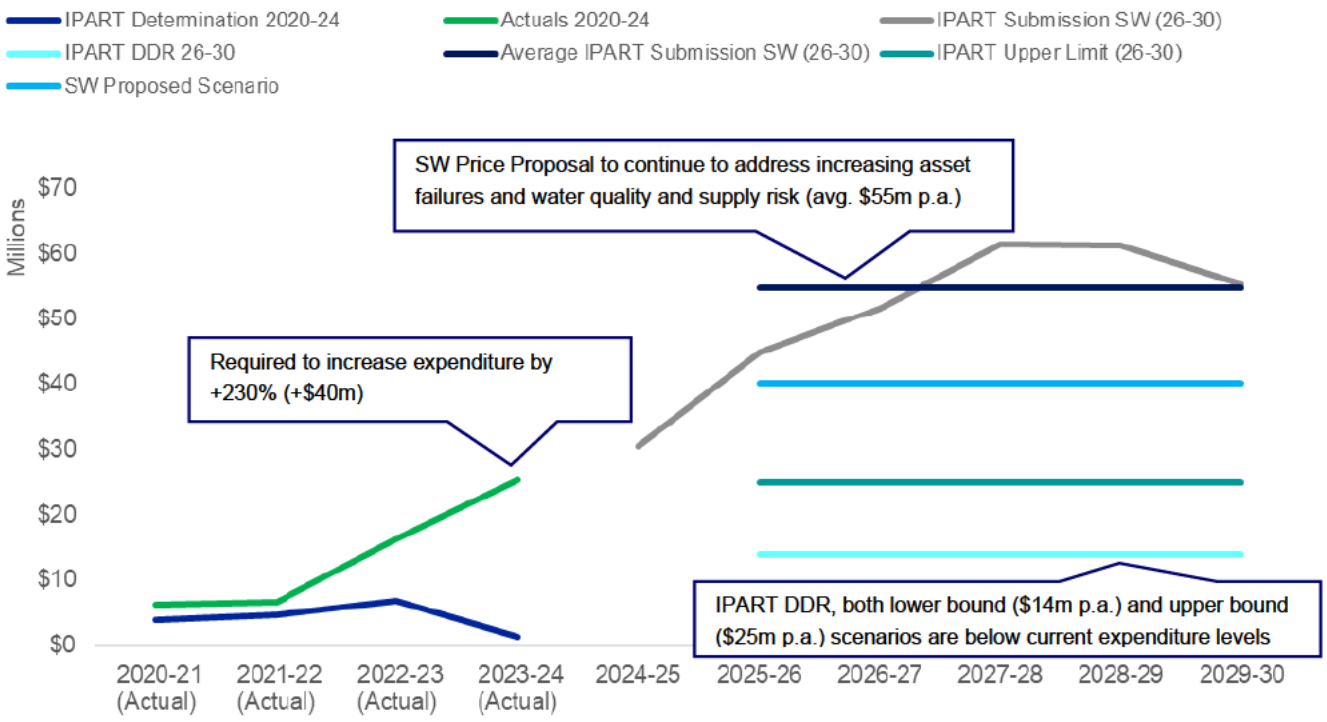
The draft determination proposed reduction in the expenditure from $55m a year to $14m a year is equivalent to 2 cents less per week per customer and is accompanied by a disproportionate risk of disruptions to customer drinking water services.

Both the upper and lower positions proposed by AtkinsRéalis create a material risk that millions of customers cannot receive safe and clean drinking water, having given limited weight to evidence of ageing assets, asset failures, and a proposed expenditure allowance that is less than current expenditure levels that have been deemed prudent and efficient.

This is only $7 million more per annum then the $32 million actual spend in 2024-25[102] which has been deemed prudent and efficient in the draft determination. This assumes no increase in expenditure from the current forecasted level of investment in 2025-26 (the start of the period).

101 Sydney Water (2024) Price Proposal 2025-30, p.380
102 RFI78

Figure A.2.38 Water Filtration Plants – Price Proposal and proposed draft determination capital investment



2.6.4 Wastewater Resource Recovery Facility Renewals

The levels of expenditure across our WWRF maintenance, renewals, and growth investment programs are required to address failing assets and current non-compliance issues. The proposed reductions now put this at significant risk.

The required investment will enable progress towards current performance targets, customer objectives and new obligations, with a significant proportion of the asset base at or approaching end of life. Specifically, this investment will support our customers' interest in protecting the environment and further improving the condition of Sydney's waterways.

As noted in our WRRF Program Investment Plan (pg 36) Water Resource Recovery service performance is measured in several ways, with key requirements / targets being load and concentration non-compliance, and non-compliant bypasses. These targets align with our EPL's and customer's priorities and relate closely with a range of different capital investments included in both the renewals and growth investment programs. Not all aspects will be completely addressed by the proposed Renewals Investment but are at least partly related as part of considered growth and renewals needs considerations required to meet compliance.

Over the current 2020-24 period we have had to overspend the level of WRRF renewals expenditure by over $214 million, or 60% from the 2020-24 determination of $359 million, to manage the risk of further deterioration of EPL compliance, of which has been deemed prudent and efficient.

We already have systems non-compliant with EPL requirements

Our *Price Proposal* outlines the funding needed to reduce risks and ensure the sustainability of our wastewater systems. Currently, 11 out of 24 wastewater systems are non-compliant, with five more trending toward failure. We are committed to resolving these challenges and have developed an optimised plan and set out the investments needed to implement essential improvements. Without this crucial funding, delaying renewals and reducing maintenance could result in more overflows and pollution, increasing the risk of not meeting environmental standards and potentially leading to beach and waterway closures. Key compliance issues include:

- **Load and concentration non-compliance** – 12 non-compliances in 2023-24 and above the required EPL licence requirement of zero. Overall, there were 5 limit exceedances for load limits and seven for concentration limits.
- **Non-compliant bypasses** – 19 non-compliant bypasses, related to failure of components such as PLC circuit breaker, IDAL decanter boots, variable speed drives, penstock gearbox, and inlet screens, as most of these coincided with wet weather events. Due to the instantaneous nature of the performance criterium, such equipment breakdown in peak flow events will directly affect bypass compliance. Focus on addressing recurring non-compliances and ensure throughput capacities maintained through activities such as filter media replacement works.

Figure A.2.39 Performance of our WRRFs – load and concentration non-compliances since 2015

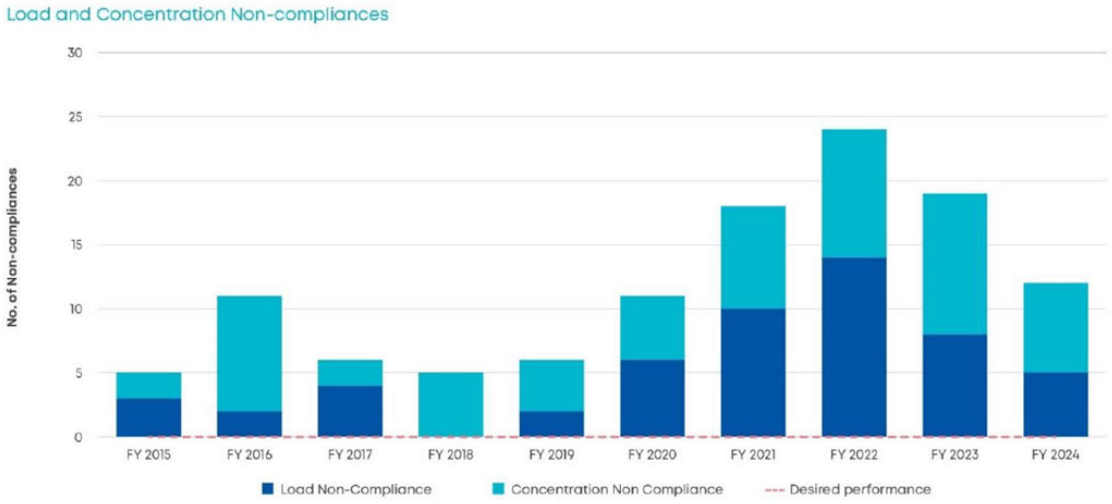
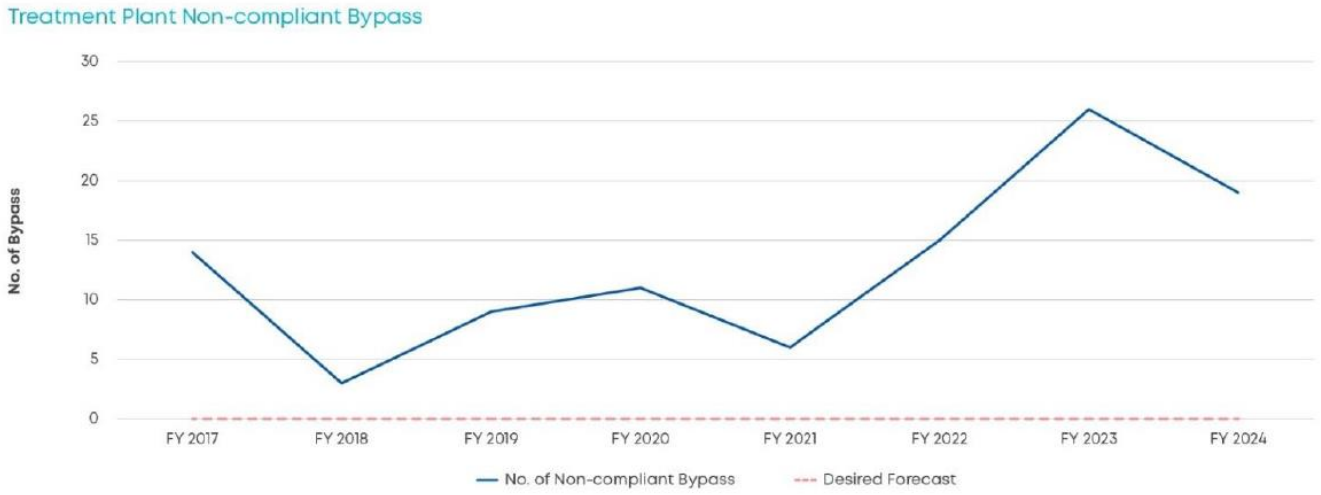


Figure A.2.40 non-compliant bypasses at our WRRFs (2017-2024)



Under the low investment scenario suggested by the AtkinsRéalis Review, our modelling shows that **less than half of our Water Resource Recovery Facilities would be compliant by 2030**. We will not be able to treat wastewater to the Licence limits from our EPLs with deteriorating current assets resulting in more community impacts due to wastewater contamination, odour, etc.

There is a growing number of environment harm incidents due to deteriorated assets, renewals backlog, and historically constrained maintenance investment (please refer to Section 1.4.2). Compounded by WRRF capacity being exceeded with deferred growth upgrades in growing catchments, leading to periods (years) of pollutant breakthrough events.

We estimate up to six wastewater systems will experience environmental harm incidents during the next price period including increase risk of extreme consequence events such as cliff face bypass off Bondi WRRF resulting in the closure of Bondi Beach that additionally impact business's relying on tourism. Elsewhere, there is potential for an increase in waterway contamination with potential subsequent fish kills due to raw sewage bypasses, ammonia breakthrough events, and/or high nutrient loads to the Hawkesbury Nepean River system leading to algal bloom and associated toxicity impacts.

Material Harm events are likely to be more acute and chronic, especially as related to capacity gaps compounded by reliability issues will lead to prosecutions.

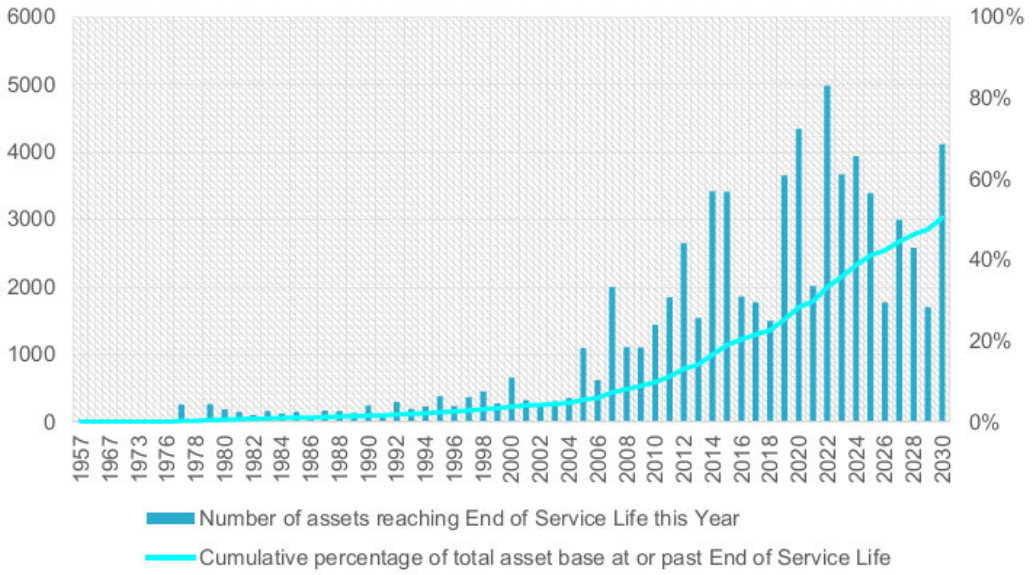
Under the proposed reduced expenditure asset condition are likely to continue to deteriorate, failure rates would not improve, backlog would continue to increase, and WRRF systems would not be able to return to compliance as more assets approach end-of-life.

Over the last three years the condition of water resource recovery facilities has deteriorated as the asset performance has declined and renewal programs needed to be fast tracked to manage the deterioration. The modelling and condition assessment have demonstrated that an increasing number of assets are approaching the end of their useful lives. In many cases, they require either modernisation or first-time replacement due to obsolescence or poor condition.

Our condition-based asset management practices have enabled many assets to operate far beyond their original design life, optimising costs to customers and efficiency of operations.

Where assets pass their expected end of life while still performing within risk tolerances, we keep them in service and defer renewal to optimise costs for customers. Many assets are now reaching a point where they can no longer be efficiently kept in service.

Figure A.2.41 Water Resource Recovery Facilities – profile of assets reaching end of life



We have experience both an upwards trend in asset failure rates and increase asset backlog, with the data reveals a clear upward trend in required reactive unplanned maintenance activities as a result.

Figure A.2.42 Water Resource Recovery Facilities – increasing asset failures and unplanned jobs

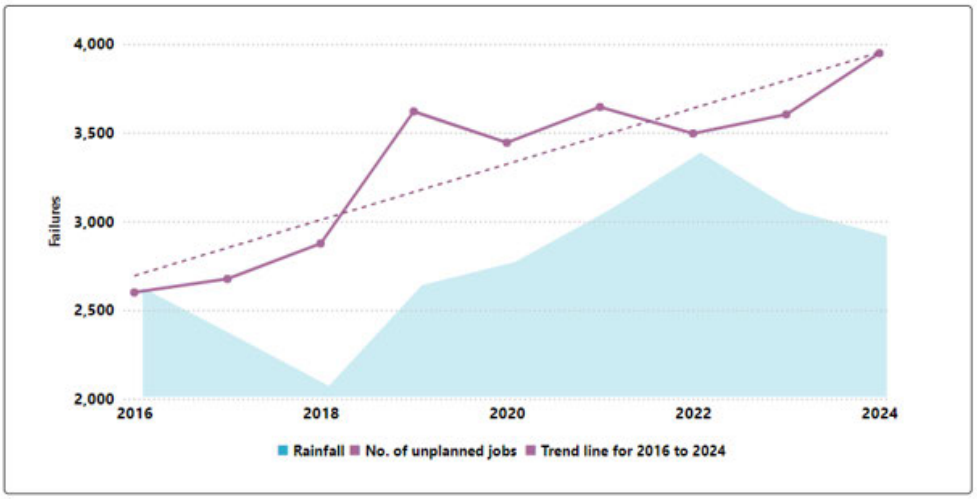
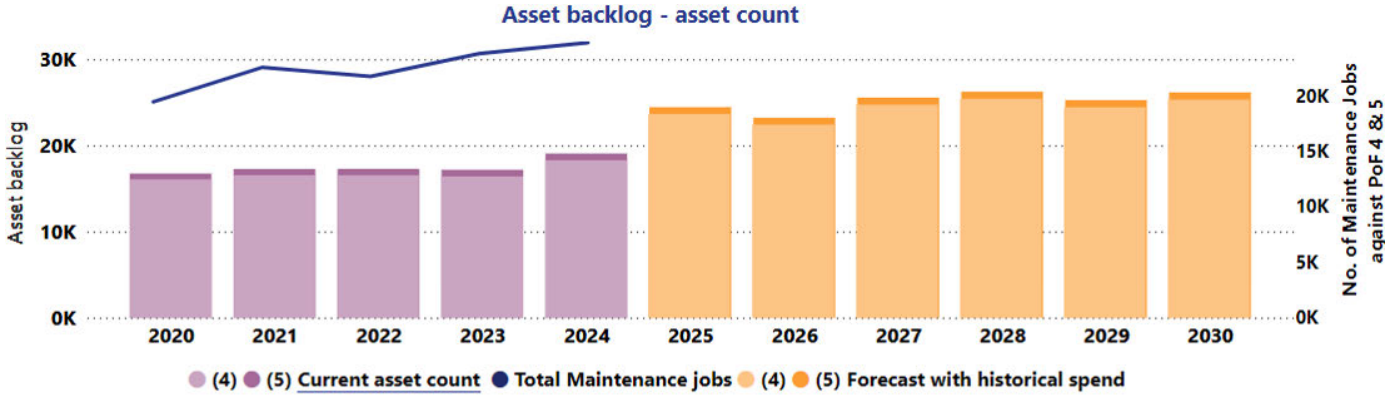


Figure A.2.43 Water Resource Recovery Facilities – increasing asset backlog



We have provided factual corrections to AtkinsRéalis which have not been considered or incorporated into their final report.

AtkinsRéalis summarised the review of our wholistic renewal programs based on Bondi WRRF data as AtkinsRéalis noted that "*We are concerned about the appropriateness of the scores given to assets in practice and their applicability to development of a renewals program specifically. Our review of the asset data underlying the proposed Bondi Wastewater Resource Recovery Facility (WRRF) renewals program found that the majority (60%) of the facility's assets have been assigned the highest possible consequence of failure5 ('extreme') including some which seem unlikely to have such high impact "*[103].

We consider this position to be inaccurate as:

- Bondi WRRF is uniquely critical due to its age, location (connected to heritage sites, ocean, and dense residential areas), and operational context, meaning it is an EXTREME example and should not be used as representative example our wholistic asset base.
- We provided the asset level data for Bondi WRRF as part of the RFI 103 response with Consequence of Failure (CoF) at the process unit level, which include a collection of lower tier components. AtkinsRéalis incorrectly applied the Process CoF to all the components within the process units and concluded that they are concerned about the appropriateness.
- Our application of CoF is outlined in the infrastructure strategies that are based on a system approach, as such the Process CoF is aligned to industry best practice standards and to our corporate risk matrix / board risk appetite.
- We provided 29 system and sub regional plans in addition to eight infrastructure strategies to AtkinsRéalis as part of our submission which appear to not have been considered in the review or mentioned anywhere in their report.

Forecasted risk implications of reduced funding levels to Water Resource Recovery Facilities

As a result of the proposed funding reduction in the Draft Determination, only 53% of projects currently underway or in the planning phase can be completed. An additional 47% of high-risk renewals will be deferred impacting 15 (50%) of Sydney Waters Water Resource Recovery Facilities, that treat effluent transferred from customer properties to:

- Recover and transform wastewater into recycled water for use in residential customer homes and industry, reducing the demand on drinking water.
- Treat product to a standard that is safe for release into water ways, and not impacting aquatic industries (oyster farms), allows recreation uses for fishing and swimming in rivers and beaches, and does not pollute in a way that encourages weed growth within the eco-systems, ie Algae Blooms in the Hawkesbury River (refer to photos below).

Example of large facility projects impacted, and waterways potentially impacted are listed below:

Ocean release facilities –

- Major Beaches include Bondi, Manly, Cronulla and Wollongong, impacts on local businesses and tourism.
- 28 deferrals spread over 7 plants including some of Sydney Waters oldest facilities at Bondi, North Head, Malabar, Warriewood, Wollongong, Cronulla and Bellambi at $295 million, impacting the treatment streams and potential for direct ocean discharge. Over 70% of collected wastewater from Sydney Water customers are treated from coastal facilities.

Hawkesbury Nepean release facilities –

- Oyster farming and recreation areas between Penrith and Pitt Water
- 13 project renewals spread over seven Inland facilities located at Penrith, Winmalee, Wallica, Riverstone, Castle Hill, West Hornsby and Hornsby Heights at $27 Million, including Ultra Violet (UV) and Reclaimed Effluent (RE) systems for recycled water production.

Georges River release facilities –

- Major recreation areas include Botany Bay, Chipping Norton Lakes and recycled water supply to Second Sydney Airport
- Six project renewals spread over two facilities at Liverpool and Glenfield, for $16 million Electrical upgrade, including diffuser replacement in the aeration tanks reducing odour impacts on adjoining customers and transfer pump upgrades.

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103 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 18

The upper range will allow an additional 14 projects from the ones listed above. However, this leaves no allowance for the 33 remaining high risk projects we have already identified nor any additional projects that may emerge during period. Further, there is no allowance for any new regulatory compliance requirements such as the new Biosolids requirements or Workplace Exposure Standards, or ensuring emerging electrical renewals and managing ARC flash safety risks are completed.

We note that Workcover NSW Safety standards for airbourne gas limits are changing in December 2026, and it is expected that additional new investment will be required to meet the new compliance requirements. These have not been formally identified and Sydney Water teams are assessing the impacts to plan new candidates. As well cost of delivery works may be subject to variation to meet new worker safety requirements.

Additionally, the EPA are currenting reviewing to finalise the NSW biosolids guidelines, this is likely to require new investment to achieve increasing quality standards. The guidelines are expected to be finalised in early FY26.

This high-risk classification is directly linked to our IPART and EPA regulatory obligations. Simply if we do not do all the high risk identified projects, it raises the risk of increasing in facility overflows or bypasses, resulting in environmental harm and community health risk, leading to potential prosecutions and not be able to meet our Operating and EPA requirements.

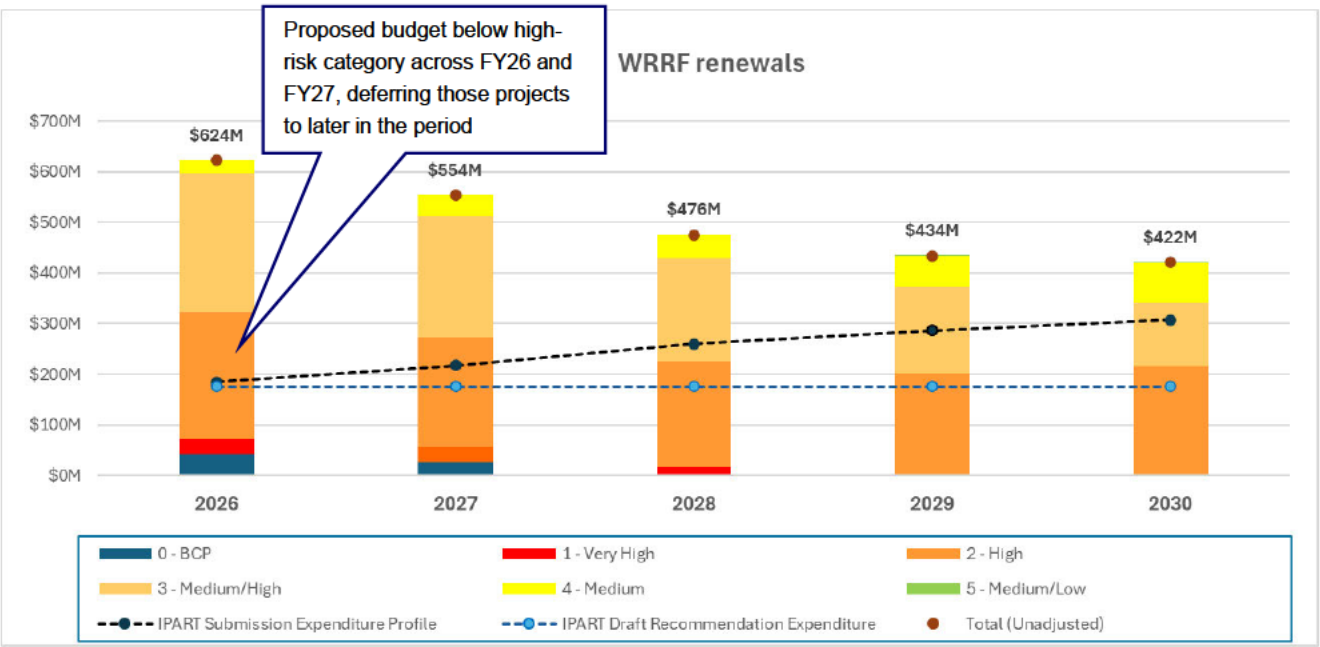
We are already taking considerable risk within our original proposal, and we have adjusted our budget by half from over $2.5 billion to $1.25 billion, to solely focus on those projects addressing Very high- or high-risk asset projects.

We are even taking more risk in the short term with less budget then identified or high-risk asset across 2025-26 and 2026-27, deferring projects as long as possible to try to manage cost pressures to customers.

We also note that 40% of Very High and High Risks process units are NOT funded through renewals and require additional maintenance to meet the environmental protection licence outcomes.

The proposed reductions of $360 million across the five years decrease our ability to deliver nearly 30% of high-risk projects, deferring them to the following period (or requiring us to spend over budget).

Figure A.2.44 Proposed reduction to Renewals compared to risk profile - WRRFs

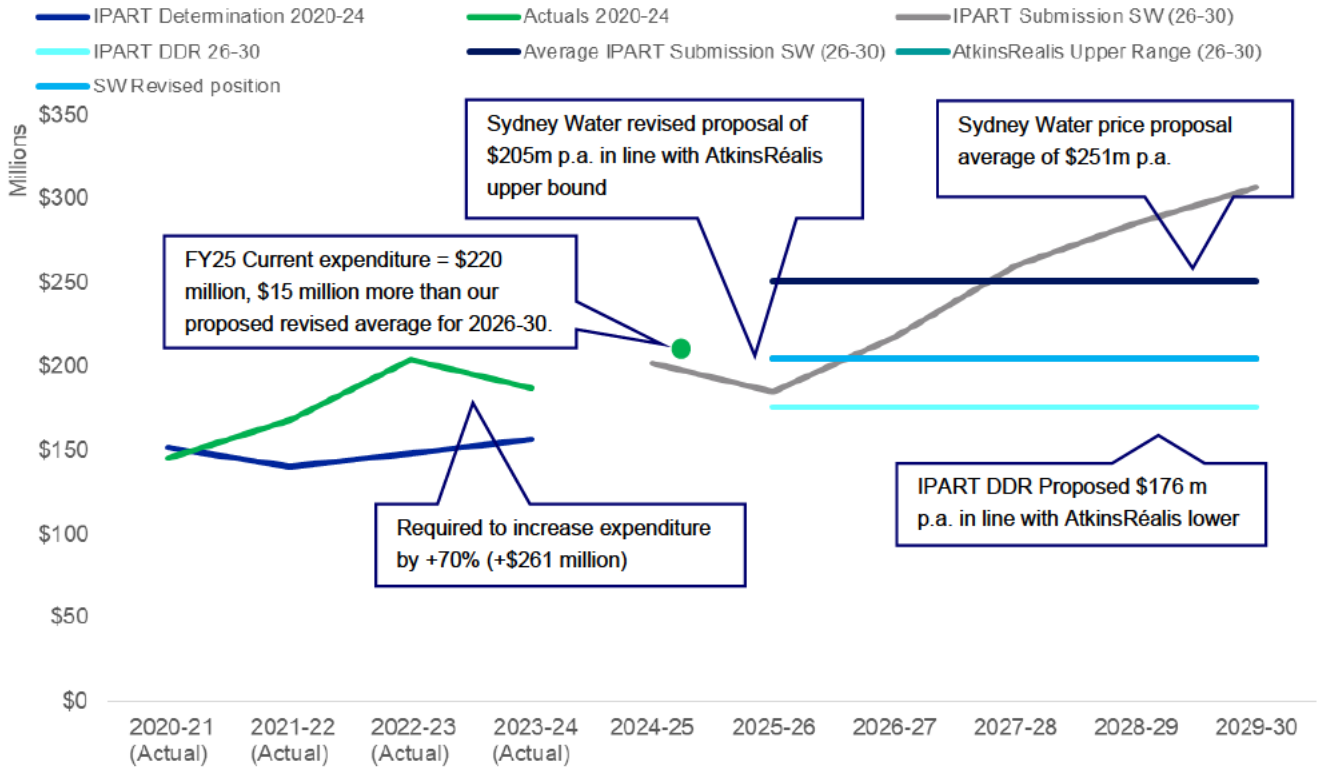


In acknowledgement of providing further affordability considerations, we propose a reduced expenditure of $230 million (or 18%), aligning our revised proposal to AtkinsRéalis Upper Bound Scenario, noting that this comes with additional risk.

We support AtkinsRéalis statement that adopting their upper range scenario comes with significant risk given that *"WRRFs are significant risk assets. Not all risks are visible from asset risk assessments and performance data. Reactive workorders have been on the increase in the long term."*[104]

We also note that our current 2024-25 expenditure is $220 million, $15 million more than the proposed revised average for the 2025-30 period putting no doubt to our ability to deliver. Given our revised funding position is below our current expenditure and our original price submission and does not sufficiently cover all High risks required projects, we strongly believe that we will have to overspend this proposed budget allocation to maintain operating requirements and meet customer expectations. This will create further customer bill pressure in the next determination period which we ask IPART to consider when finalising their determination.

Figure A.2.45 WRRF – Price Proposal and proposed draft determination capital investment



104 AtkinsRéalis (2025) IPART Sydney Water Expenditure review p. 204

2.6.5 Stormwater Renewals

The Stormwater Network Program investment is required to maintain and renew stormwater assets, to ensure asset integrity for stormwater flows, ensure communities are safe and properties are protected from flooding, and provide ecological and societal benefits.

Sydney Water owns nearly 458 km of major trunk stormwater assets in 73 catchments across Sydney, including large parts of the CBD, eastern suburbs and the inner west, of which 70% was constructed before 1950 before contemporary expectations of flood management and environmental protection were introduced in the 1970s and 1980s.

The program focuses on like for like renewal of stormwater trunk assets (pipes and concrete channels), as well as including naturalisation of channels and renewal of ancillary assets (gross pollutant pollution traps (GPT), and natural treatment systems (wetlands).

Customer engagement through the "Our Water, Our Voice" program revealed strong community support and a willingness to pay for improved waterway health, pollution prevention, provide Cool, Green and Natural Places and enhanced recreational spaces. The proposed concrete channel naturalisation's and GPT and wetland renewal works directly reflect these values and are consistent with IPART's 3Cs framework, where customers feedback was overwhelming willingness to pay more for improved waterway health and Cool, Green spaces, prevent pollution and safe swimming and recreation.

By nearly halving the stormwater renewal budget from $291 million to $141 million, we will have to defer these customer and community priorities in favour of short-term reactive repairs.

The reduced program forces us to only deliver renewals on underground assets to prevent collapse and minor works to repair / replace concrete open channels, which will essentially defer any work on naturalisation / healthy waterways. This lost opportunity will likely create customer, public and external stakeholder concern around deferred improvements in waterway health, with significant negative impacts across:

Increased Risk and Reduced Resilience

- The reduced budget forces prioritisation of underground asset renewals to prevent collapse, sidelining naturalisation and ecological improvements.
- Prolonged exposure to the risk of aged and outdated assets, including stormwater network failures causing flooding to people and property, disruption to traffic and other services such as public transport.

Deferring or cancelling naturalisation projects

- 40% of the submission ($110 million) provides for naturalisation of existing channels / basins and renewal of existing Waterway Health Improvement Program (WHIP) structures. This aligns 100% with customer feedback.
- Naturalised stormwater channels, which offer greater climate resilience than outdated concrete systems, will not be delivered. These projects are vital for improving urban waterway health and green infrastructure benefits[105].
- WHIP and renewal projects such as the restoration of Iron Cove and St Luke (Inner West / Canada Bay), Sefton park and Cooks river (Bankstown), and Rouse Hill Wetland Rehabilitation (The Hill Shire), are now at risk and will not deliver on the naturalisation of waterways in line with customer and community expectations.
- This is evidenced by multiple Ministerial and Council enquiries seeking us to undertake even more naturalisation work, and the 2019 Gillespie Willingness-to-Pay Report which identified strong community support for improvement of urban waterways and a willingness to pay to achieve this. This was reaffirmed through the 'Our Water, Our Voice' Customer Engagement Program in 2023-24, which highlights the importance of considering naturalisation as a pivotal part of renewal projects. If designed and maintained properly, naturalised stormwater channels are more climate resilient than out-dated concrete channels.
- Current planning coordination with Councils will be deferred impacting master planning for Councils of adjacent greenspaces.

105 Valuing green infrastructure and public places - Case Study: How Sydney Water secured funding to protect our waterways

Figure A.2.46 Case Study showing successful stormwater renewal and naturalisation projects

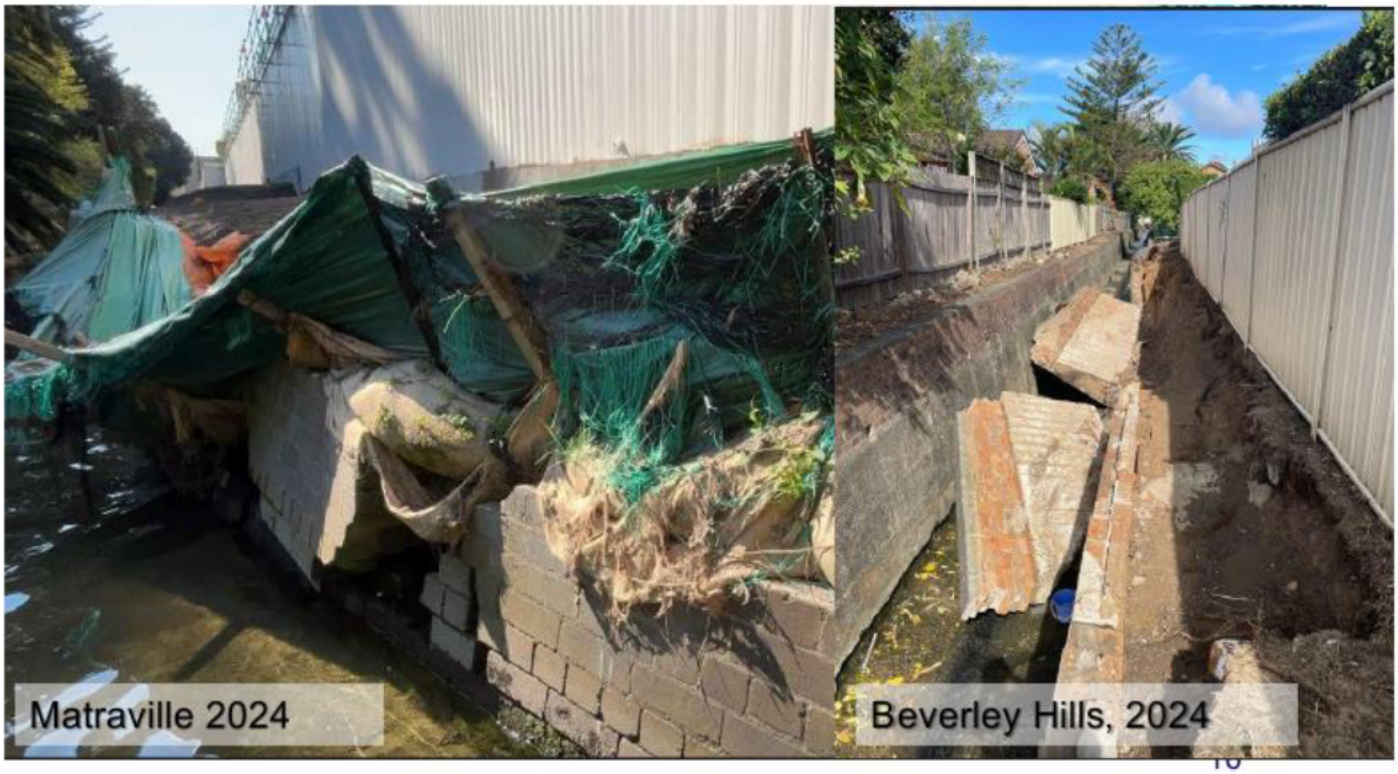
Our program has already delivered considerable benefit to the community, with the proposed reduction now putting projects like this at risk.

The Stormwater Network Program has a strong alignment with the plans and objectives of councils, as many assets owned by Sydney Water also interface with council assets. As a result we work closely with councils, particularly in relation to flood risk and waterway health improvement projects. Examples in the last period are shown below including Milsons Park, Johnsons Creek and Sydney CBD projects (above).

We have already adjusted our program significantly and are taking a 'run-to-fail approach' across a large portion of our stormwater systems.

Condition-based asset management has prolonged the life of many assets, but 70% of Sydney Water's stormwater network was constructed before 1950 and recent severe wet weather has worsened the condition of these older assets. Sydney is experiencing more frequent and severe wet weather events. Alongside increasing infill and development this puts more pressure on the ageing Sydney Water stormwater network. As a result, Sydney Water is seeing more frequent failures of stormwater assets due to these heavy flow events (refer photos below of recent events).

Figure A.2.47 Recent stormwater channel failures due to flooding events



Whilst we do operate on a 'run to fail' for a large portion of the asset base, we proactively manage the risk with the potential to impact critical infrastructure across Sydney CBD such as Metro and Light rail, or heritage assets.

A key example of this is the Tank Stream refurbishment project at Circular Quay which has a Permanent Conservation Order is in place, and is listed in the NSW State Heritage Register, and because of safety concerns Place Management NSW have restricted access to any vehicles over the asset due to risk of collapse.

While Sydney Water operates and maintains trunk infrastructure including channels, canals and naturalise creeks across various parts of the operating area, the greatest density is in around the Sydney City, Central Business District, with parts of the stormwater system built over 100 years ago with some sections dating back to 1863. These assets are often in close proximity with many other critical underground and above ground services as technology expansion including telecommunications and power.

The program is to manage these assets to keep Sydney CBD moving.

Catastrophic failure of these stormwater assets has the potential to result in widespread flooding of the Sydney CBD during rainfall, and a public safety hazard if a sink hole forms over the asset, as they are particularly susceptible to induced live and vibrational loading from construction works around the city.

A large part of the stormwater program is to remediate and renew section of the already deteriorated CBD stormwater system. Our 2020-25 works were part of a staged forward plan which we plan to continue over 2025-30. The works provide a deliverable (confirmed

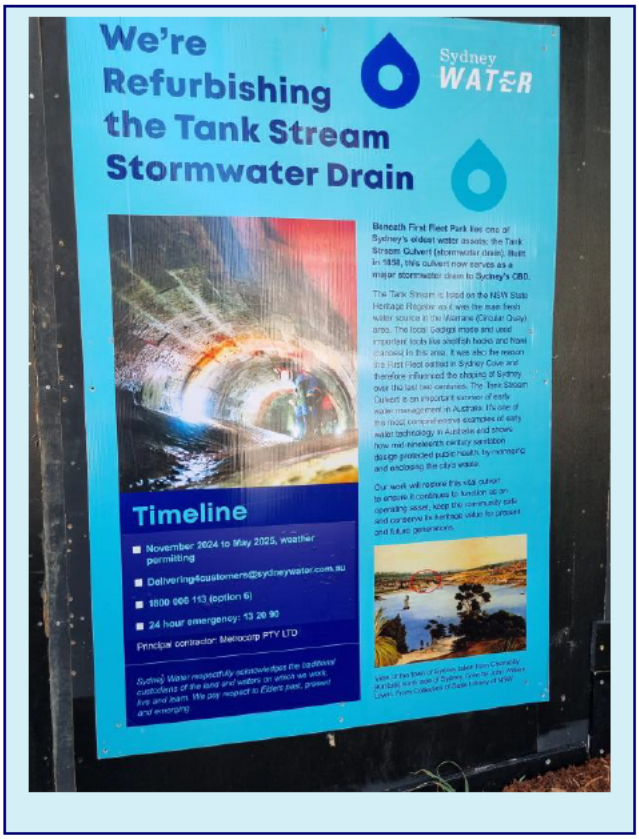


Figure A.2.48 Tank Stream refurbishment at Circular Quay

with market), targeted (risk-focused) and appropriate approach to keeping the Sydney CBD stormwater network in a safe and working condition.

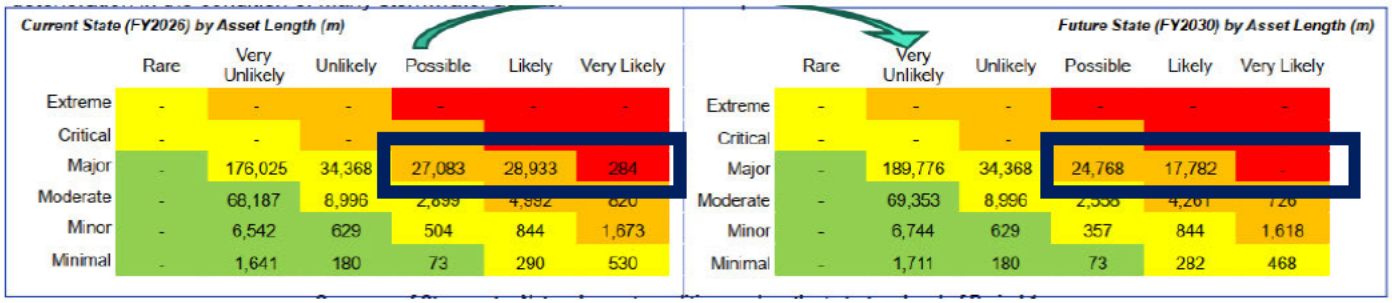
Our risk-based approach means we focus on the very high risk – the infrastructure that matters.

AtkinsRéalis justify their proposed reduction on the perception we are investing in 'green' (or 'good') condition assets, and state *" The business has not justified why customers should pay more to reduce the level of risks facing its stormwater assets which it already classifies as in 'green' condition."* [106] Our submission shows that out of the 458 kilometres of Stormwater pipes and channels, we have only sought funding to renewal 11 kilometres, less than 2.5% of the total asset base.

This is only a third of the 30 kilometres that has been identified as likely or very likely to result in a major consequential failure, not the 'green' condition asset as stated by Atkins.

We will seek to manage the remaining two thirds through reactive and interim repair type approaches.

Figure A.2.49 Current state versus future state risk[107]



Further reductions proposed by AtkinsRéalis are caveated with the risk that "*Not all risks are visible from asset risk assessments and performance data. This may especially be the case with civil structures which make up a significant part of stormwater assets.*"[108]

We are proposing to take on further risk to support affordability issues for customers, and proposing a reduced funding position of $40 million p.a. in line with current expenditure levels and what was determined prudent and efficient in the 2020-24 determination.

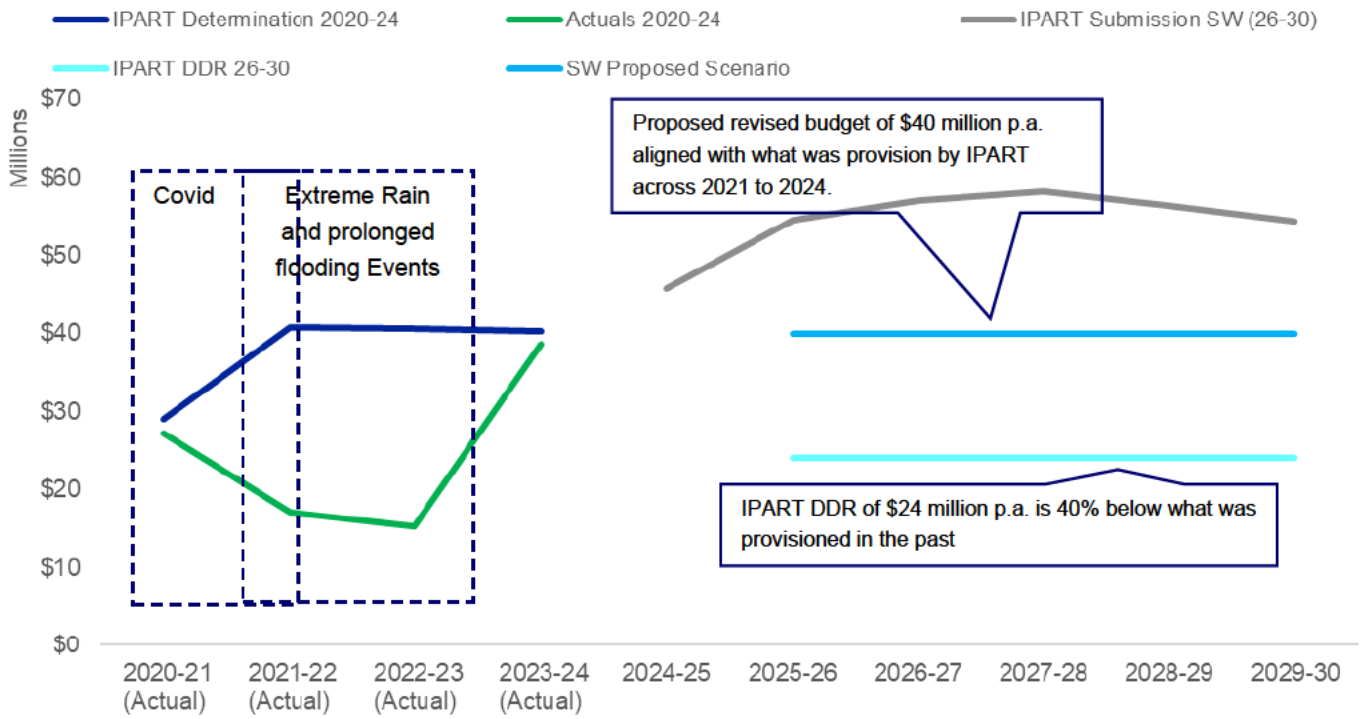
Given the severity of impact of delays from Covid lockdowns, and then the prolonged extreme wet weather (and inability to do renewals when stormwater channels are flooded), and the subsequent accelerated increase in asset deterioration and structural failures, using the historical average from 2020-24 is not an appropriate baseline to be setting for the next five years.

Whilst we still consider our original proposal to be both prudent and efficient, we are prepared to take further risk on the stormwater program and set budget to the level which has been deemed prudent in the past. Our revised proposal is for $40 million p.a. in line with current FY25 expenditure levels and what was set as appropriate by IPART from 2021-22. (refer Figure A.2.50 below)

We do envisage this could result in delays or cancellation of waterway naturalisation projects that have been advocated by local ministers, the public, and councils as we will have to either priorities urgent renewals, and/or de-scope these projects having a direct community impact.

106 AtkinsRéalis (2025) *IPART Sydney Water Expenditure review* p. 235
107 Sydney Water (2024) *Stormwater program investment plan* p. 23
108 AtkinsRéalis (2025) *IPART Sydney Water Expenditure review* v4 p. 236

Figure A.2.50 Stormwater – Price Proposal and proposed draft determination capital investment



2.6.6 Other Renewals

Property

We accept the forecast capital investment for property renewals proposed in IPART's draft decision. This decision relies on the recommendations from AtkinsRéalis' expenditure review of the program, which places a further 10% stretch target on the program.

We note that while the reduction is accepted, there remains a residual risk that this lower level of funding may constrain our ability to meet key workplace health and safety and environmental obligations over the determination period. As explored in our expenditure review with AtkinsRéalis, many of our workplace facilities and worksites are aged and require upgrades to remain compliant with regulatory standards.

Remaining water and wastewater networks

We accept the forecast capital investment for remaining water and wastewater network renewals proposed in IPART's draft decision which is aligned with our *Price Proposal*.

2.7 Water meters

IPART's draft decision defers the capital allowance we need to deliver our smart metering program. We do not support this decision as it is contrary to the short and long-term interests of our customers. We urge IPART to re-consider its decision as it does not reflect that:

- Smart meters contribute to the delivery of lowest cost water supply.
- The draft operating cost allowance does not account for the actual cost of providing these services over the next five years.
- Smart meters are essential to deliver the efficiency gains proposed by Sydney Water, driving down customers' bills.

Industry reports indicate this approach aligns with better practice[109]. Utilities such as Southeast Water in Melbourne are on track to rollout smart meters to 85% of their customers by 2028 and 100% by 2033. By 2033 Water Corporation (Western Australia), Yarra Valley Water (Melbourne), and Unitywater (South-East Queensland) will have rolled out smart meters to all or most of their customers. In comparable cities globally, utilities in London, Paris, Madrid, Auckland, and Singapore have all completed significant portions of their smart meter rollouts and plan to be practically complete by 2035 or earlier. If IPART defer the capital allowance needed, Sydney will fall behind comparable cities in the level of customer service and value delivered to our community.

This view was echoed in our expenditure review, as AtkinsRéalis agreed that this program is in the long-term interests of customers and reflects an investment a digitally mature utility would undertake. We note that IPART's draft decision was to not provide an expenditure allowance for this program, despite the supportive commentary of AtkinsRéalis, and provided no commentary in the draft report supporting the rationale for the draft decision.

Smart meters offer better value for money than like for like meter replacements

In our original proposal, smart meters contributed to $290.1 million of customer benefits and delivery of an average water saving of 8,450 million litres for customers per year over the full rollout of 10 years. Using the pricing from the draft determination, there is a further $28.5 million of customer benefits from water saving. That would bring the total benefits to a new amount of $318.6 million.

AtkinsRéalis noted the need for IPART to consider the impacts of the smart meter program when setting other expenditure and revenue allowances While we understand that IPART has adjusted our bulk water volumes to reflect water savings which will no longer be delivered by setting a $0 capex allowance for smart meters, we are concerned that a similar adjustment has not been applied for the cost savings from smart meters embedded in our proposal or the increased operational costs associated with continuing with a traditional mechanical meter fleet .

Once these adjustments are corrected, we estimate that the overall bill impact to our customers is higher under the draft determination compared to our original proposal. Accounting for the regulatory lives of these assets, the reduction to the program results in a decrease in water bills by around $7 per year ($4 per due to capex and $3 due to step opex). However, meters at the end of their life must be replaced so this cost cannot be entirely avoided.

IPART's draft decision is to instead allow $75m over 5 years for like for like replacements, at an estimated bill impact of $1.64 while this option appears to deliver better value for customers, that is not the case. If Sydney Water were to deliver this option, it would require $24.7 million cost of operating expenditure and a further capital uplift of $74.45m to reflect the real market cost of capital renewals over the next five years.

Therefore, mechanical meter replacements would amount to amount to $6.85 per customer per year ($4.6 from capex and $2.24 from opex), in addition to losing the longer-term efficiencies described above saving customers only 21 cents per year.

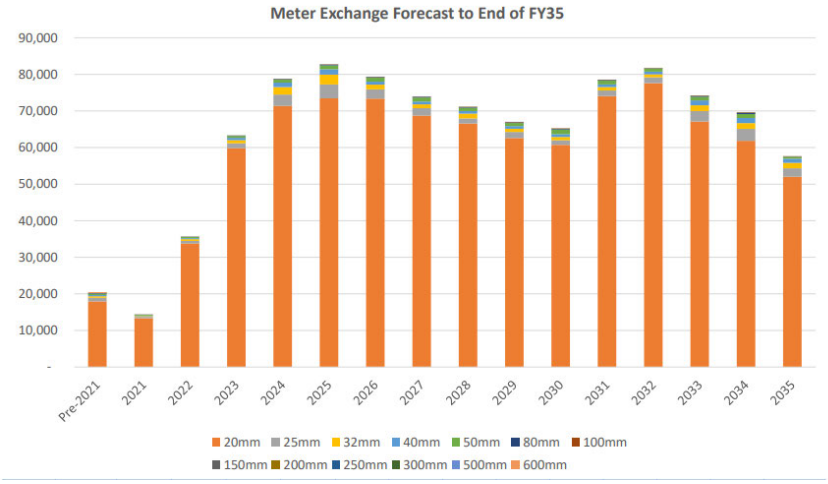
109 WSAA (2025) "Smart Metering State of Play Report"

Figure A.2.51 After accounting for 1) Step opex costs, and 2) Capex forecasts for like-for-like replacement, we estimate a saving of only 4c cheaper per customer per week

Historic levels of metering capex funding will not service renewals demand or higher unit prices

During AtkinsRéalis' expenditure review, we raised that like-for-like replacement of mechanical meters estimates does not reflect the efficient costs of replacing approximately 142,485 water meters per year over the next 5 years (712,428 total) compared to the historic average of 59,000 meters per year (FY22-24) used to inform AtkinsRéalis' expenditure assumption. Figure A.2.52 details the scale of meter replacement due over the next 25 years.

Figure A.2.52 Scheduled replacement date for meters in Sydney Water's network as presented to AtkinsRéalis



Sydney Water's bottom-up estimates (based on current market prices) to deliver this need amounts to $149.45m almost double IPART's draft capital allowance of $75m. We note that unit costs were not reviewed as part of AtkinsRéalis final report; therefore, the tribunals decision appears to have not considered real costs of provisioning this service in the current Australian Market.

Sydney Water notes that the unit rates for this costing are trending above other market indices with prices during this regulatory period rising between 25-38%. This is driven by the cost of mechanical meters growing.

Our vendors identify the following drivers for this trend:

1. Growing demand for smart meters by water utilities both globally and domestically is driving economies of scale lowering production costs

2. Lower demand for mechanical meters is worsening economics of scale for producers

3. Increases in material input costs for mechanical meters such as copper and brass.

Recent surveys and quotes have indicated that some suppliers may soon be charging up to 50% more for like for like mechanical meter replacements (Across all meter sizes) than seen in the current regulatory period. As a result, the $149.5m base case is likely a lower range estimate for efficient opex costs as it does not consider this trend. Sydney Water is open to providing these unit rates, to the tribunal to substantiate this claim.

For 14 cents per customer per week,[110] customers benefit from higher service levels and leak alerts

Our smart metering initiative complements our water efficiency programs, enabling faster identification of potential leaks and more accurate identification of smaller leaks that are not picked up by traditional quarterly meter readings. Alongside cost savings the initiative has for reducing the scale of our metering contracts, the downstream costs from remedying reading errors, and improving network management, our proposed investment in smart meters minimises the overall cost to customers for water services.

The benefits to our customers have only increased with IPART's draft decisions. Notably, AtkinsRéalis' support for the program identified benefits beyond the conservative estimate we provided during the expenditure review resulting in an additional $6.5m above Sydney Water's original estimate due to higher water usage charges (compared to service charges). These benefits are not purely financial, this messaging helps prevent bill shock as customers with large leaks often contact Sydney Water to receive hidden leak rebates or other forms of hardship support.

BAU like for like replacement also introduces a degree of service deterioration for those in multi-level individually metered complexes. Since 2014 high rise customers have received the benefits of smart metering through our MLIM program. This allowance would result in these customers billing experience going backwards, as their digital systems would be replaced with mechanical devices.

If IPART were not to support our transition to smart metering in this period, we would still require an additional $26 million in capex to fund the digital system uplift to prepare for a smart meter rollout in the next period. Uplifting our smart metering digital systems in this period will reduce risk to delivering on Sydney Water's digital roadmap.

Sydney Water included this $26 million capex in our original preferred option of transitioning to smart metering, but it was not included in the like-for-like option proposed by IPART in the draft report.

Table A.2.14 Capital allowance for metering renewals (Customer savings inclusive of opex reductions)

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to custom er	Explanation
Digital Water Meters	$318m ($292m metering capex, $26m digital capex)	$75	$0.04 per customer per week[111]	$318	$318m ($0.17 per customer per week)	We do not accept the proposed draft determination position to undertake like for like replacements instead of smart metering as it delivers less value for customers. Our proposal enables $294.9m in benefits over the next 10 years, exceeding the additional $169m of capex and $8m in opex incurred to deliver this option.

110 Includes both water metering capex and telecommunications opex step change.
111 After adjusting for higher capital costs of renewal and operating costs for like for like replacements

2.8 Compliance and Improvement

We accept the forecast capital investment for Compliance adopted in IPART's draft decision, which for the most part aligns with our submission.

While we accept the proposed reduction in funding, it appears to be based of a factual error with our understanding is this reduction was based on costs presented in three selected business cases[112] provided to AtkinsRéalis during the review. While these projects make up the bulk of the Wet Weather Overflow Abatement (WWOA) program, the WWOA program also contain several other discrete initiatives, such as Mill Stream Source Control, and the integrated catchment modelling works. We believe this is an oversight by AtkinsRéalis and the expenditure allowances for these initiatives should be reinstated with no efficiency adjustments applied.

We also note that this decision appears inconsistent with AtkinsRéalis' own assessment that the program is both efficient and prudent noting that this is *a 'well-tailored program which Sydney Water has good experience of delivering and which is likely to deliver material benefits to the environment and water users. It is also now a stated requirement in the EPL. We have therefore included it in the Upper range of costs*.'[113]. Despite this, AtkinsRéalis' recommended a $46 million, 15% reduction of the program in their upper range noting the risk and advantages remain '*as per Sydney Water proposal*'.[114]

It is also worth noting that AtkinsRéalis' proposed a lower range for the Compliance program by assuming an arbitrary 80% cut to this program with justification that '*this is a very high level top-down adjustment as we do not have an alternative basis to quantify the expenditure*'.[115]

Overall, we note that while we don't agree on the reduction, and we are accepting it, the upper bound carries a higher degree of risk compared to our *Price Proposal*.

Table A.2.15 Infrastructure Capital Investment – Compliance and Improvement

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
Compliance (WWOA)	$242	$205	1c per week	$205	-	We accept the draft determination position.
Improvement	$137	$137	-	$137	-	We accept the draft determination position.
Compliance & Improvement	$379	$342	1c per week	$342	-	

112 We provided three business cases for the Source Control program in the North, South and West areas.
113 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, p. 249.
114 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, p. 249.
115 AtkinsRéalis (2025) IPART Sydney Water Expenditure review, p. 249.

2.9 Infrastructure Portfolio adjustment

Given the size and complexity of the infrastructure capital portfolio, we considered it was appropriate to push ourselves and set an ambitious portfolio capital efficiency factor in our *Price Proposal* and keep customer bills low. This portfolio-wide downward adjustment of 8%, equated to just under $1.5 billion across the 5-year 2025-30 period. This is on top-down percentage applied across the portfolio, on top off the individual project and program adjustments.

We remain committed to driving efficiency and continuous improvement across the entire portfolio, and we believe that a portfolio adjustment of 8% remains appropriate (as was generally supported by AtkinsRéalis throughout their report), but this is a percentage factor allocated on the portfolio, not a set amount as is proposed in the current Draft Determination, which has worked out to be around 15% - doubling the efficiency factor to a unachievable, and unjustified level.

Given the Mamre Road and Western Sydney Aerotropolis Program has had its own efficiency review, we additionally request that is excluded from this portfolio adjustment calculation.

We have calculated the portfolio adjustment of our revised proposal below.

Table A.2.16 Infrastructure Capital Investment – portfolio adjustment

Initiatives ($m, 2025-30)	Sydney Water Submission	IPART DDR	Draft Decision customer $ saved	Sydney Water revised position	Revised position cost to customer	Explanation
Infrastructure portfolio adjustment	-$1,461	-$1,461	-	-$1,148	5 cents per week	We do not accept the draft determination position. The relative percentage (-8%) should be maintained and not unjustifiably increased.

Attachment 3: Revenue Requirement

We have revised the proposed NRR based on our view of appropriate expenditure. We have also adjusted some other components in the NRR calculation where we hold a different view or consider IPART may have made an inadvertent error.

Our proposed notional revenue requirement

Compared to our *Price Proposal*, IPART's total draft notional revenue requirement (NRR) across 2025-26 to 2029-30 is $17.6 billion, or 12% lower, driven by a reduction in WACC and allowable expenditure.

We recommend IPART amend the proposed notional revenue adjustments to reflect the above positions. This section discusses each of these recommendations in detail. These changes result in the total revenue requirement for 2025-26 to 2029-30 increasing slightly to $18.5 billion which is just $0.9b or 5% more than IPART's total draft notional revenue requirement (NRR).

Table A.3.1 Sydney Water's proposed Notional revenue requirement ($2024-25, $ million)

	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2026-30
Core operating expenses	1,147	1,199	1,234	1,245	1,265	1,289	$6,232
Bulk water costs	598	615	605	605	607	608	$3,040
Return on assets	854	956	1,023	1,079	1,126	1,171	$5,355
Regulatory depreciation	604	541	593	644	686	724	$3,187
Return on working capital	11	10	12	15	16	16	$70
Tax allowance	64	27	15	11	6	3	$63
Adjustments	0	581	0	0	0	0	581
Notional revenue requirement	**3,277**	**3,929**	**3,482**	**3,599**	**3,706**	**3,812**	**18,528**

*DVAM and True-Up adjustments

3.1 Revisions to NRR assumptions

Sydney Water proposes IPART adjust its NRR to reflect the above table. This would require the following adjustments.

3.1.1 Tax allowance

In its Draft Determination Report, IPART made a draft decision to change its current approach to setting allowances to cover the cost of tax obligations:

1. To entirely remove the allowance to cover the cost of Sydney Water's tax expense associated with the receipt of assets free of charge (AFOC).
2. To include imputation or franking credits within the allowance to cover the cost of Sydney Water's tax expense associated with cash capital contributions.

Removing the allowance for the tax expense related to the receipt of assets free of charge (AFOC)

IPART proposes to apply the Federal Court of Australia's decision from Victoria Power Networks Pty Ltd v Commissioner of Taxation [2020] FCAFC 169 (the VPN case) to Sydney Water. The outcome from the VPN case was that no amount of assessable income arises for the taxpayer given the taxpayer's regulatory regime and the existence of a rebate to cover uneconomic connections.

We applied Sydney Water's AFOC transactions and regulatory regime against the principles of the VPN case. We concluded that Sydney Water is more likely than less likely to continue to remain obligated to pay tax on AFOC received. This is for the following reasons:

1. In the ATOs' most recent Decision Impact Statement on the VPN case, the ATO stated that the decision was one reached on special facts. The ATO did not consider the VPN case having wider application. The decision which concerned the application of section 21A of the Income Tax Assessment Act 1936 (Cth) may have implications for taxpayers only in industries with closely similar regulatory regimes to that of the taxpayer in the VPN case.
2. The Commissioner of Taxation is still assessing the potential impact of the VPN case decision for other infrastructure providers and regulated industries including for water. The National Tax Equivalent Regime six months' update ended 31 December 2024 indicates this review remains ongoing and "further work is still required given the complexities involved in applying the VPN court decision".
3. Sydney Water obtained independent taxation advice which evaluated whether Sydney Water's regulatory regime was similar to the regulatory regime of the taxpayer within the VPN case. Post receipt of the taxation advice, we concluded:
4. That it was challenging for Sydney Water to substitute the construction cost of the asset with a lesser amount such as the rebate available to the taxpayer within the VPN case; and
5. There are insufficient factors to support a positive outcome in a Privately Binding Ruling (PBR) process (given the absence of a rebate and the differences in our regulatory regime to that of the VPN taxpayer).

At the time of the drafting of this report, the ATO has not issued any additional guidance on the application of the VPN case and no other water utilities have been successful in gaining a PBR on this matter. We hold the view that the current tax treatment of treating the AFOC as assessable for income tax purposes remains appropriate. As a result, the change to the allowance to cover the AFOC tax expense to reduce this to nil will not provide sufficient revenue recovery to cover the costs of our taxation liability. A high-level analysis indicates that the removal of the AFOC tax allowance will lead to around $1 billion increase in our debt levels and thus increase our interest payments.

Also, the reduction in the tax allowance on AFOC would mean that Sydney Water recovers costs when receiving cash contributions but does not recover the costs when receiving AFOC. This will lead to Sydney Water encouraging developers to make direct contribution to the costs of their development areas rather than constructing and gifting AFOC to Sydney Water.

In their review of Hunter Water prices from 1 July 2025, IPART's final decision is that the uncertainties surrounding the tax implications of AFOC are too large to warrant a pre-emptive removal of the tax allowance from the NRR. As such, IPART have maintained their usual approach of including a tax allowance for AFOC in Hunter Water's prices. We ask for this treatment of including tax allowance for AFOC be also applied in our final determination.

Tax payable on cash capital contributions

IPART proposes to refine its usual approach of calculating an allowance to cover the tax expense associated with cash capital contributions. It proposes to reduce the current allowance from 30% (applying a 30% tax rate against the value of the cash contributions received) to 22.5% to incorporate imputation credits. We accept this approach as it generally aligns with the approach used for non-cash capital contributions.

While we are supportive of this change, we note the previous treatment of applying a 30% tax allowance served to provide some compensation for the timing mismatch between when the tax must be paid and when the tax was funded. That is, under the 'net of tax' treatment for infrastructure contributions, although we incur the tax expense as an operational cost in the year we receive the cash contributions, we will not be fully compensated for that expense for many decades, as this funding comes from the 'return on' and the 'return of' against our RAB spread out over the average age of assets within our RAB. This is marked contrast with how Sydney Water recovers the tax allowance for the income tax paid on AFOC (under the existing method) at an earlier point relative to the tax allowance for cash contributions. In theory, the tax costs are recovered when the forecast AFOC is received.

Sydney Water notes that the NSW Government is considering allowing developers to enter into works-in-kind agreements as an alternative to the payment of cash capital contributions under the Housing and Productivity Contribution framework. We anticipate that developers may seek similar arrangements for our infrastructure, which could result in a change in the mix of cash vs non-cash capital contributions compared to historical practice. We consider the regulatory framework should not prevent or disincentivise the most efficient delivery mechanism, whether that be an in-kind / non cash capital contribution or a cash capital contribution. As far as

practical, on an *ex-ante* basis, Sydney Water and its customers should be indifferent between the two options and have the freedom to select the most efficient outcome depending on the circumstances and infrastructure involved. As the issues surrounding tax on cash capital is complex, we consider further exploration on the issue is required. We suggest IPART lead a review with stakeholders on the methodology to ensure that the treatment is fit for purpose.

3.1.2 Infrastructure contributions

The NSW Government reintroduced infrastructure contributions from 1 July 2024, after being set to zero since December 2008. In a transition plan approved by the NSW Treasurer, the infrastructure contributions were to be capped at 25 per cent of the full charge in 2024–25, 50 per cent in 2025–26, and full infrastructure contributions applying from 1 July 2026.

Cash contributions that we receive from third parties towards our capital investment, such as government grants and infrastructure contributions from developers, are deducted from capital investment (net of tax) in the RAB so that customers do not pay a return on assets or regulatory depreciation for capital investment that has been funded from other sources. However, the net of tax approach does mean the value of tax payable on infrastructure contributions remains in the RAB to be recovered from customers over time.

Infrastructure contributions represent a significant element of Sydney Water's overall revenue and have a positive impact on lowering end user prices. Infrastructure contributions also support Sydney Water's financial viability, providing in-period cash to help reduce the need for borrowing. It is important that the revenue from infrastructure contributions is accurately reflected in the Determination, including reflecting the flow-on implications of other decisions such as a reduced capital investment allowance for growth servicing which, all else equal, could be expected to reduce new connections and therefore infrastructure contribution revenue.

Infrastructure contributions which are part of Sydney Water's regulatory framework work on an impactor / beneficiary pays principle. Sydney Water levies upfront charges on developers to recover the costs of providing water, wastewater and/or stormwater infrastructure for new developments. The charges are designed to ensure that our existing customers do not face higher costs as a result of new developments.

For their Draft Determination Report, IPART have used forecast total pre-tax infrastructure contributions of $3.8 billion[116] to deduct from our RAB net of tax over the 2025-26 to 2029-30 period. Of this $3.8 billion:

1. $1.3 billion relates to our general water and wastewater infrastructure contributions as per our *Price Proposal*
2. $1.9 billion relates to our Mamre/Aerotropolis and Rouse Hill least cost schemes which is in line with our revised forecasts provided to IPART during the AtkinsRéalis efficiency review
3. $0.5 billion is the result of a calculation error relating to the Mamre/Aerotropolis and Rouse Hill revised forecasts in point 2

We largely accept IPART's draft decision for the second point but note that for the Mamre Road precinct, this is $190 million lower than that reflected in the forecast contributions in our Mamre Road Development Servicing Plan which IPART registered in May this year. As this problem involves the contributions, capex and growth forecast for Mamre Road, we provide further explanation in Section 3.3.4. We also ask IPART to re-examine the first and third points.

On the first point, in the Draft Determination IPART have used the forecast from our *Price Proposal*. This forecast will still apply if growth servicing assumptions remained unchanged. However, IPART's proposed reduction of around $2 billion in growth servicing capital investment across 2026-30 will result in delays in development and constrain growth. We suggest that the infrastructure contribution forecast should be revised downwards to reflect the lower underpinning growth and connection assumptions. We can work with IPART to find out what this means in quantifying scaled down forecasts. As we are asking IPART in this proposal to reverse their position of disallowing the $2 billion worth of growth servicing capex in their draft determination, we have assumed general water and wastewater infrastructure contributions are similar to those in our *Price Proposal* for the modelling of our revenue requirement, prices and bills.

On the third point, we have found a calculation error where IPART has not correctly accounted for the lower level of infrastructure contributions resulting from the revised Mamre/Aerotropolis and Rouse Hill forecasts. This results in an overstatement of the

116 Not including $0.6 billion of tax gross up which IPART applied to implement their draft decision for Sydney Water to recover income tax on stormwater developer contributions from wastewater customers.

wastewater infrastructure contributions included in the pricing model being deducted from the RAB. We suggest IPART review and amend their calculations to eliminate this error.

We have also identified that some of the infrastructure contributions included in the forecast relate to unfunded assets. We consider that infrastructure contributions related to unfunded assets should not be deducted from the RAB. Please see section 3.3.5 for more details.

We recommend IPART review the infrastructure contribution forecasts to ensure they align with the updated expenditure allowances and growth assumptions to be included in the Final Determination, and also use the updated forecasts in the assessment of Sydney Water's financial viability assessment.

3.2 Integrated water cycle management

3.2.1 Improved funding allocation for least-cost growth services

We are pleased IPART has implemented some of the significant improvements to IWCM funding they enabled in their 2019 determination for recycled water. IPART has accepted that two existing and one new third-pipe recycled water schemes form part of the least cost way to deliver essential water services to growth to protect sensitive and vulnerable waterways. This means we have greater confidence, going forward, that IWCM will be funded on an equal footing as traditional services when it delivers what customers need at least cost. This benefits all customers and keeps bills lower by incentivising innovative least-cost servicing.

We agree with IPART's decision to fund the income tax cost associated with developer contributions for stormwater infrastructure which protects waterway health via a contribution that all customers pay in their wastewater bills. It would not be equitable for a smaller sub-set of customers to fund a significant tax which does not stem directly from the services they receive.

3.2.2 Some cost allocation remains inequitable

We remain concerned that IPART's draft decision to fund the residual cost (net of income tax and developer contributions) of greenfield stormwater servicing from the smaller sub-set of Sydney Water's stormwater customers will lead to inequitable customer bills in the longer-term. This is because contributions paid by developers for these services only include 30 years of operational costs, meaning, over time, operational costs will need to be funded by a smaller group of customers who have neither caused nor directly benefited from the additional cost associated with growth in other areas.

We however accept IPART's suggestion to provide additional evidence of customer and stakeholder support for wider reform of stormwater pricing in the future. We plan to engage further on stormwater servicing, waterway health and growth funding to support our next price proposal for 2030-2035 prices.

In this section we outline several concerns we have with the way IPART have allocated costs in the price calculations supporting their draft determination.

3.2.3 Recycled water revenue should be used to reduce customer bills and developer contributions

Our proposal was that when recycled water formed part of the least-cost way to deliver a wastewater or stormwater service, the revenue from the sale of that water should be used to offset both customer bills and developer contributions. In the IPART price calculation model provided to Sydney Water, it appears IPART have instead used only 50% of this revenue to offset customer bills[117]. In addition, it appears IPART have used the revenue to offset drinking water bills rather than stormwater and wastewater bills.

This appears to be a different position to the one IPART adopted in their 2019 determination on recycled water prices. We request IPART reconsider this treatment in their final determination as it is not clear why this revenue should reduce drinking water bills, nor

117 See IPART (2025) *Draft Report - Review of prices for Sydney Water Corporation from 1 October 2025*, which proposed 50% of such revenue to be retained however their final report reverted to a position that 100% of this revenue should be retained by Sydney Water. We understand this was on the assumption that drinking water demand forecasts would not account for reduced sales volumes, so we would need to be compensated for use of inflated demand forecasts.

why Sydney Water should be allowed to retain 50% of this revenue[118]. This revenue only exists because we are delivering regulated least-cost essential wastewater and stormwater services, and it does not reduce the revenue we receive from the sale of drinking water. It has also not increased drinking water bills because we have not used a demand forecast which is lower than the actual expected drinking water sales given the necessity and existence of these schemes. As IPART noted in their final report relating to their 2019 determination of recycled water pricing:

In determining potable (drinking) *water charges, we will account for any water demand that is instead being met by recycled water.*

We consider there are at least two ways to adjust price calculations to account for when water demand is met by a least cost recycled water scheme. These adjustments are needed to ensure all costs and cost-offsets are included and there are no cross-subsidies between the bill calculation for different products and (so that all product prices are cost reflective) and no windfall gains for either Sydney Water or our customers and/or developers. Both methods we discuss below involve demand forecast assumptions with matching cost allocation adjustments:

1. Our proposal adopts a method which relies on a ring-fenced drinking water forecast, that is, it reflects the actual drinking water demand expected. This is then combined with allocation of all scheme costs to the essential product being delivered and 100% of the recycled water revenue then used to offset these costs. In this way, all product prices remain cost reflective, and only the total net cost is recovered by Sydney Water.
2. It appears IPART have partially adopted an alternative method. The draft finding in IPART's 2019 recycled water determination was that utilities need to be compensated for reduced drinking water sales so can retain 50% of the recycled water revenue, however this was revised to 100% in the final report. We agree a 100% retention of recycled water revenue could also be used with a number of further adjustments to our proposal to ensure cost reflective prices with no windfall gains, however we consider the method we proposed is preferable, as the 100% retention method would require additional and more complex adjustments.

Drinking water forecast with 100% recycled water revenue offset – Sydney Water's proposed cost allocation

The method we have used to ensure no cross-subsidies are introduced when customers use recycled water starts from a simpler starting point of forecasting expected drinking water demand given the existence of known recycled water schemes. Our forecasting methods already contain mechanisms to produce such a forecast without need of further manual adjustment. We consider this is preferable as it simplifies other processes such as demand forecast calibration, comparison of forecast and actual demand, bill calculation modelling and so on. The forecast of drinking water demand which we proposed, and IPART adopted in their draft determination is already adjusted downwards to account for locations where recycled water is used instead of drinking water. As outlined in our proposal, if a pragmatic, Long Run Marginal Cost (LRMC) approach is also taken to estimate net avoided drinking water costs, neither least-cost nor above least-cost recycled water demand require further adjustment to drinking water forecasts used for price calculation.

To demonstrate our method does not introduce cross-subsidies, we examine both cases of where recycled water is least-cost; firstly where the scheme meets non-drinking water requirements, and secondly those that form part of the least-cost way to deliver drinking water services.

Recycled water schemes which meet stormwater or wastewater needs at least cost:

All our least-cost recycled water schemes (Rouse Hill, Wilton/Bingara and Mamre/Aerotropolis) are required to deliver wastewater or stormwater services to meet waterway health requirements. If we did not deliver a centralised recycled water service at these locations, drinking water would still have been reduced to the same or similar extent to meet development requirements in these catchments. For example, at Mamre Road, the alternative to the integrated recycled stormwater system we delivered was for development controls to be met by stormwater being collected and re-used on-lot. This on-lot re-use would result in the same or similar reduction in drinking water demand. As such, the appropriate way to forecast drinking water demand is to adjust the forecast downwards to account for these mandatory development requirements which result in lower drinking water demand. Given there is no impact from our delivery of these schemes on drinking water demand, no further adjustment is necessary to the calculation of drinking water prices once this downwards adjustment of the demand forecast has been made.

Next, we must consider how to treat the additional revenue Sydney Water will receive because we sell recycled water from these schemes. Our proposal is that customers and developers should only pay the net efficient cost of the essential services we provide.

118 See IPART (2023) *Water Regulation Handbook*, which allows us to retain 50% of the profits associated with non-regulated activities. We do not consider a least-cost recycled water system to be a non-regulated activity, rather, these are a least-cost component of essential water services.

As the cost of these schemes are being paid by stormwater customers, wastewater customers and developers, the revenue from recycled water sales should be used to offset those charges. That is, at Mamre Road/Aerotropolis recycled water usage revenue should be used to offset **stormwater** customer charges and developer contributions, and for Wilton/Bingara and Rouse Hill, to offset **wastewater** customer charges and developer contributions. If we retained any of this revenue, stormwater and wastewater customers and developers would be paying more than the net efficient cost to deliver their services. We do not need to keep any of this revenue, because the drinking water demand forecast has already been adjusted downwards so it only includes expected drinking water demand under current regulatory settings for development in each area.

Recycled water schemes which meet water demand needs at least cost:

These schemes exist and are justified because they reduce overall water supply related costs. That is, they are a least-cost component of delivering all the water supply our customers' need. As such, we consider the net cost of these schemes would be included in drinking water bill calculations. There will also be avoided costs to consider, however we proposed that where recycled water schemes replace drinking water, a pragmatic approach to *net avoided costs*[119] should apply. That is, while these schemes reduce demand on the drinking water network which results in an avoided cost, this benefit can be valued at the Long Run Marginal Cost (LRMC) of water. Equally, the schemes reduce revenue from selling that same volume of drinking water, which is also proportional to the LRMC of drinking water. The pragmatic approach is that because drinking water usage charges and avoided costs are both set with regard to LRMC, the benefit and cost of any recycled water scheme which reduces demand on the drinking water network are equal so can be ignored when setting drinking water prices. We set out further details of how the alternative to the pragmatic LRMC approach is far more complicated, of negligible benefit and higher cost, in our *Price Proposal*[120].

We did not propose that any of our current recycled water schemes met water supply needs at least-cost, however, if we did, we would have adopted the same method of first adjusting drinking water demand forecasts so that they provide a true reflection of expected **drinking water** demand only. That is, our demand forecasting models would adjust for the drinking water savings from these schemes and forecast only the volume required to be delivered by the drinking water network.

Next, we must again consider how to treat the additional revenue Sydney Water would receive from selling the recycled water from these schemes. Given the full cost of the scheme will have been added to the calculation of drinking water prices, and the demand on the drinking water system has already been reduced to account for the scheme, it is appropriate that 100% of this revenue is used to offset the cost. Once again, if less than 100% of this revenue was shared with customers (to reduce bills) and developers (to reduce contributions) they would be funding more than the net efficient cost to deliver the essential water supply service they receive. We consider this is consistent with IPART's intention for funding of least-cost recycled water schemes which was to ensure drinking water customers do not cross-subsidise recycled water services or vice versa[121].

We would be happy to provide further explanation of our position that the above method is preferable to IPART if required.

Inflated drinking water forecast with 100% recycled water revenue retained by Sydney Water[122] – IPART alternative

An alternative to the method we proposed would involve an upwards adjustment of the drinking water forecast we proposed and IPART used to set drinking water prices. This method might be more appropriate if our proposed drinking water demand was forecast without adjustment for lower use by properties with a recycled water connection. The rationale under this scenario is that if drinking water prices are set without consideration of the lower demand by these properties, Sydney Water would under-recover the efficient cost to deliver drinking water services and would therefore need compensation for this lost revenue (revenue foregone).

If IPART prefer to adopt this alternative method, they must first add back in to the drinking water forecast the total volume of recycled water we forecast to sell and retain the revenue from. In addition, an additional 'revenue foregone' cost item would need to be added into the drinking water price calculation to account for the fact that recycled water is sold at 90% of the price of drinking water, so even if the demand forecast has been adjusted upwards, the revenue to recover that adjustment will only recover 90% of

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119 See: IPART (2019) *Review of pricing arrangements for recycled water and related services - Final Report*, which included the decision that recycled water avoided costs must be calculated net of potable revenue foregone. IPART referred to this as the 'net avoided cost'.
120 Sydney Water (2024) *Price Proposal 2025-30*, pp. 466-467.
121 See: IPART (2019) *Review of pricing arrangements for recycled water and related services - Final Report*, p. 23, which states that "This ensures potable water customers in the absence of developer charges do not cross-subsidise recycled water".
122 We do not consider that 50:50 sharing of revenue would be consistent with this methodology as it would imply that drinking water forecasts used to set drinking water charges were at the same time too high, so require Sydney Water to retain additional revenue as compensation, and too low, so require customers to retain some additional revenue as compensation.

the full cost of that supply. Finally, for each least-cost scheme in this proposal, an additional step must be taken to transfer avoided costs so that wastewater and stormwater prices are cost reflective (not too high) and drinking water prices only reflect drinking water related costs (not too low).

Although we consider this alternative method is unnecessarily complex, we still demonstrate how this alternative method could remove any cross-subsidies, by examining both cases of where recycled water is least-cost; where the scheme meets non-drinking water requirements, and those that form part of the least-cost way to deliver drinking water services.

Recycled water schemes which meet stormwater or wastewater needs at least cost:

As noted above, all our least-cost recycled water schemes are required to deliver wastewater or stormwater services. As such, the appropriate way to forecast drinking water demand is to adjust these downwards to account for the regulatory requirements in place for these locations which also caused the need for these schemes. This is because drinking water demand will be the same or similar regardless of whether we deliver a centralised recycled water service or developers adopt an alternative method. This is reflected in our current drinking water forecast. However, if Sydney Water were to retain 100% of the revenue from recycled water sales, the drinking water forecast must be first increased, and the revenue foregone can be paid as an avoided cost to stormwater or wastewater customers and developers. That is, in this case, there are three adjustments (because we start from a drinking water forecast that already reflects drinking water demand only):

- Adjust the drinking water demand forecast upwards so that it includes both drinking water and recycled water demand
- Add an additional cost of the revenue which Sydney Water will then have foregone from selling recycled water instead of drinking water in this price calculation and deduct this revenue as an avoided cost from wastewater and stormwater charge calculations. (Mamre/Aerotropolis is stormwater, Wilton/Bingara and Rouse Hill are wastewater). This step must also consider the price differential between drinking water and recycled water usage prices
- Allow Sydney Water to retain 100% of the recycled water revenue from the scheme as compensation for drinking water prices being set too low to recover full efficient costs to deliver that supply.

We consider the above steps are unnecessarily complex and not needed given our drinking water forecast already reflects the expected demand considering the necessity and existence of these schemes.

Recycled water schemes which meet water demand needs at least cost:

As noted above, these schemes exist and are justified because they reduce overall water supply related costs. The considerations around net avoided costs are also identical regardless of which method is used to ensure no cross-subsidies. We note again, we did not propose that any of our current recycled water schemes met water supply needs at least-cost, however, if we did, we would have adopted the same method for adjusting drinking water demand forecasts so that they provide a true reflection of likely drinking water demand. That is, our demand forecasting models would adjust for the drinking water savings from these schemes and forecast only the volume required to be delivered by the drinking water network.

Next, we must consider what adjustments IPART must make if they would prefer Sydney Water to retain 100% of the revenue from recycled water sales (as was envisaged in IPART's 2019 recycled water determination). Without any further adjustments, if we retained any of this revenue, drinking water customers and developers would be paying more than 100% of the net efficient cost to deliver essential water supply services and Sydney Water will receive a windfall gain of 100% of this revenue. We do not think it would be IPART's intention for us to receive a windfall gain because of us adopting least-cost water supply servicing. As such, to remove this windfall, and ensure no cross-subsidies, we suggest IPART would need to make the following adjustments:

- Adjust the drinking water demand forecast upwards so that it includes both drinking water and recycled water demand
- Add the price differential between drinking water and recycled water usage prices as a revenue foregone item in drinking water price calculation.
- Allow Sydney Water to retain 100% of the recycled water from the scheme as compensation for drinking water prices being set too low to recover full efficient costs to deliver that supply.

If we were to propose a recycled water scheme as a component of least-cost water supply, we consider the above steps are not necessary as our drinking water forecasts already reflect the expected demand considering the necessity and existence of these schemes. Rather, it would again be preferable to include all costs and cost-offsets (recycled water usage revenue) in the calculation of drinking water prices, so long as the forecast for drinking water sales reflects expected drinking water demand only.

3.2.4 Mamre Road/Aerotropolis IWCM stormwater servicing

We agree with IPART's position that our efficient cost to deliver this scheme should align with AtkinsRéalis' findings for the Aerotropolis scheme and IPART's 2024 efficiency review of the Mamre Road scheme (which resulted in the Mamre Road DSP, registered by IPART in May this year). However, three forecast assumptions relating to the Mamre Road scheme which are used to calculate wastewater and stormwater customer prices proposed in the draft report appear inconsistent with IPART's position.

In the IPART pricing model provided to Sydney Water, it appears IPART have not updated these pricing inputs to match the Mamre efficiency review outcome and associated and registered DSP:

4. The **capex** in IPART's retail price calculation model appears to overestimate the capex efficiency IPART determined in the Mamre efficiency review, resulting in a 27% rather than a 16% reduction in capex. When adjusted to align with IPART's 2024 efficiency review of this scheme, that is, once a 16% efficiency is applied, the capital investment in the Mamre DSP is $455 million in the period 2026-2030 (or $483 million from 2025-2030). This DSP was registered by IPART because it was found to be consistent with their efficiency review **including** the 16% capex savings identified in that review. However, the IPART pricing model we were provided assumes a significantly lower capex figure of only $328 million (or $381 million for 2025-30).
5. The **new customer numbers** are understated by almost 2,500 house equivalents by 2030 compared to the Mamre DSP forecast
6. The **infrastructure contributions** are $140 million lower than forecast in the Mamre DSP.

We do not think it was IPART's intention to use inconsistent pricing assumptions between the Mamre Road scheme efficiency review and resulting developer contributions and this review of customer retail prices. Although some of the inconsistency may be explained because the registration of the Mamre DSP occurred later than the results of the AtkinsRealis efficiency review, there are still other discrepancies which arise from misinterpretation of the forecasts we provided to AtkinsRealis. We request that each of these inputs be revised in the final determination to ensure developer and customer pricing reflect identical cost assumptions where possible. Below are further details which explains how we have come to this position:

- AtkinsRéalis reported an incorrect figure ($32 million lower for 2026-30) for Sydney Water 'current proposed' Mamre Road capex.
- AtkinsRéalis also incorrectly assume the figure they started with **did not** include the 16% efficiency savings from IPART's 2024 review, so further reduced this capex in their upper and lower bound recommendations.
- Sydney Water subsequently updated our capex forecast for the Mamre Road DSP to better align with current growth forecasts in early years. This resulted in 8% higher capex in the DSP (after including the 16% efficiency) than that in the 'current' estimate provided to AtkinsRéalis in 2024 over the same 2025-30 period. It also forecast an additional 2,448 house equivalents would connect to the system by 2030.
- IPART found this revised capex forecast, once the charge efficiency was applied, was consistent with their 16% efficiency saving in their 2024 efficiency review before registering the DSP in May.
- Given that developer charges are calculated net of future customer contributions, we are concerned the capex and growth discrepancies between IPART's draft determination and DSP may be challenged by developers.

3.2.5 RABs should not decrease when we receive contributions for non-RAB assets

The current Rouse Hill recycled water DSP and our draft Rouse Hill stormwater DSP show that over 99% and 95% of future contributions respectively stem from the cost of existing unfunded assets. We proposed that customers should not bear the cost of these unfunded assets, as we agree with IPART, it is not generally preferable to adjust prices for expenses incurred due to changes to policy and regulatory settings. However, as our shareholder is currently bearing these unfunded development related costs, and IPART's 2019 determination enables us to recover these costs from developers, we consider that by deducting the full contribution, net of tax, IPART's draft price models introduce a cross-subsidy paid by developers to artificially reduce customer bills. We consider this was not IPART's intention so request they reconsider the way these contributions are included when setting customer bills in their final determination.[123]

123 IPART's draft price calculation includes a deduction from the stormwater RAB which matches our proposed Rouse Hill stormwater infrastructure contribution forecast, however, we were unable to determine if a similar adjustment was made to account for Rouse Hill recycled water contributions.

Attachment 4: Prices and Bill Impacts

IPART has proposed a series of changes to the 6 charges that drive 98 per cent of our regulated revenue. For wastewater, these changes reflect a reduction in the regulated revenue, while for water and stormwater, these changes reflect both a reduction in regulated revenue and a change to the approach to setting prices.

	Issue	Position
Prices		
Prices for Major services	1. Water pricing 2. Drought Pricing 3. Wastewater pricing 4. Stormwater pricing	Accept IPARTs proposed draft decisions with respect to tariff structures but not price
Prices for minor services	5. Trade Waste 6. Ancillary Services 7. Smart Metering 8. IOP	Accept IPART's tariff structure and prices
Bill Impacts		
Price path	Two large step changes followed by 3 smaller price increases	Accept.
IPART's Representation of Bill impacts	Proposes bills above a 3% threshold for water stress are unacceptable	This analysis may overstate the number of customers in water stress however we accept subsequent IPARTs conclusions
Rebates review	$599/year pensioner concession held nominally	This is a decision for the NSW Government. Noting IPART should show the bill impact of this policy recommendation in their final report
Performance and Accountability		
Customer Outcomes	Accept customer outcomes. Propose some adjustments and new measures	Accept new measures where practical and propose reviewing targets to reflect final expenditure allowance.
Financial Incentives	Accept Sydney Waters proposal with no exemptions	Proposed removing financial incentives to reflect high likelihood of spending above the regulatory allowance.

IPART has proposed a series of changes to the 6 charges that drive 98 per cent of our regulated revenue. For wastewater, these changes reflect a reduction in the regulated revenue, while for water and stormwater, these changes reflect both a reduction in regulated revenue and a change to the tariff structure:

Table A.4.1 Sydney Water's Proposed prices for major services (20mm unadjusted, $2024-25)

	Units	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30
Water charges (Unadjusted for 20mm meter)							
Water usage (IPART)	$/kL	$2.67	$3.10	$3.20	$3.30	$3.40	$3.50
Water usage (Proposed)	$/kL	$2.67	$3.10	$3.20	$3.30	$3.40	$3.50
Water service (IPART)	$/year/meter	$67.04	$31.48	$31.48	$31.48	$31.48	$31.48
Water service (Proposed)	$/year/meter	$67.04	$91.13	$91.13	$91.13	$91.13	$91.13
Wastewater charges (Unadjusted for 20mm meter)							
Wastewater usage (IPART)	$/kL	$1.36	$1.41	$1.41	$1.41	$1.41	$1.41
Wastewater usage (Proposed)	$/kL	$1.36	$1.41	$1.41	$1.41	$1.41	$1.41
Unadjusted wastewater service (IPART)	$/year/meter	$552.62	$605.44	$643.89	$686.74	$731.57	$778.47
Unadjusted wastewater service (Proposed)	$/year/meter	$552.62	$641.57	$662.67	$710.84	$761.46	$814.67
Stormwater charges							
Stormwater service (not within a multi-premises) (IPART)	$/year	$88.18	$108.09	$108.09	$108.09	$108.09	$108.09
Stormwater service (not within a multi-premises) (Proposed)	$/year	$88.18	$99.73	$99.73	$99.73	$99.73	$99.73
Stormwater service (within a multi-premises) (IPART)	$/year	$28.19	$34.56	$34.56	$34.56	$34.56	$34.56
Stormwater service (within a multi-premises) (Proposed)	$/year	$28.19	$31.88	$31.88	$31.88	$31.88	$31.88

The following section justifies the positions for each of these major services and outlines Sydney Water's response to IPART's remaining Draft Decisions on minor charges that recover approximately 2% of its regulated revenue.

4.1 Prices for major services (Water, Wastewater, Stormwater)

The following section discusses the IPART's draft decision to modify the approach to setting these prices. It does not comment on IPARTs decision to lower these charges resulting from a lower revenue requirement as this is discussed elsewhere in this response.

4.1.1 Water Usage Price

Sydney Water proposed a water usage charge set at a point estimate that reflects its best understanding of the long-run marginal cost of supplying and augmenting its water network. In principle, IPART has maintained this approach. However, IPART has deviated from Sydney Water's interpretation of the Water regulation handbook by setting the water usage charge equal to LRMC only in 2029 and increasing the usage charge between its current price of $2.67/kL to $3.50/kL in 2029-30.

While Sydney Water believes that it is more economically efficient to set the usage charge equal to the LRMC estimate for the entirety of the regulatory period, a more customer aligned outcome (in terms of a preference for variable charges) is achieved by smoothing the bill impact of this step change. We welcome increased flexibility within the framework to better reflect the outcomes customers wish to see in terms of price smoothing and accept this approach to setting the water usage charge.

4.1.2 Water Service Charge

Sydney Water agrees with IPART's approach to setting the water service charge, noting that the water usage charge should be set in a way that does not drive negative service charges. This occurs when usages charges are set at a level that over-recovers the required revenue. Consideration must be given to the risk sharing implicit between the ratio between fixed and variable charges, that is by weighting all the increases to funding our water services to variable charges that the revenue implications of demand volatility are passed onto the water utility. Where this is the case, draft decisions, such as decision 20 (maintaining DVAM materiality threshold) introduce additional revenue risk furthering Sydney Water's concerns that it receives windfall gains/losses because of climatic factors that drive water demand contrary to what we heard from customers in Phase 6 of Our Water, Our Voice.

It is not clear in IPART's draft report whether consideration has been given to the additional revenue risk associated with a higher split of variable charges, or the role customers have in price controls as required in Section 4.7.3 of IPART's *Water Regulation Handbook*.

4.1.3 Wastewater Usage Price

We welcome IPART's decision of using $1.41/kL ($2024-25) as the variable usage price for wastewater.

4.1.4 Wastewater Service Charge

Sydney Water accepts IPART's decision to continue using the wastewater deemed usage and unadjusted wastewater service charges tariff structure to recover the remainder of Sydney Water's revenue requirement and therefore its efficient costs. We also agree with IPART position of including stormwater costs associated with waterway health in wastewater charges. Please refer to Section 1.5 Stormwater Charges for more detail.

4.1.5 Stormwater Charges

IPART has made a draft decision to standardise and reprofile stormwater charges, that is to accept Sydney Water's proposal to remove differential stormwater charges based on the catchment but instead to pass through all the increase to stormwater charges come 1 October rather than smooth these increases over the next 5 years.

We welcome these changes to the proposed stormwater tariff and acknowledge the improvements made towards simpler stormwater pricing models.

We also strongly support IPART's draft decision to remove waterway health related costs from stormwater charge calculation and move them to the wastewater charge calculation. IPART agreed that the cost to upgrade stormwater systems to protect waterway

health should be shared across all customers – not just those directly connected to stormwater infrastructure. These costs support broader environmental outcomes and reflect community values around waterway health.

We also strongly support IPART's draft decision to remove waterway health related costs from stormwater charge calculation and move them to the wastewater charge calculation. IPART agreed that the cost to upgrade stormwater systems to protect waterway health should be shared across all customers – not just those directly connected to stormwater infrastructure. These costs support broader environmental outcomes and reflect community values around waterway health. Customers have consistently told us they value healthy waterways. This decision by IPART helps us deliver on that priority – at least cost, and with long-term benefits for Greater Sydney.

4.2 Prices for minor services

4.2.1 Late or declined payment fees

IPART has determined that late or declined fees should not increase in real terms as it introduces further burdens to those experiencing hardship. Not recovering these additional costs from customers would introduce an additional $524,000 ($2024-25) over the next 5 years. While there may be merit in Sydney Water recovering its efficient costs under this charge and that these additional costs incurred by those who make late or have payments declined are spread across its customer base (Estimated cost of 24 cents per customer per year), Sydney Water accepts IPARTs draft decision for the purpose of price setting.

Sydney Water also asks IPART to include the following from its 2020 final report which details the current terms and conditions for the late payment fee. This ensures that customers looking to understand IPART's final decision are aware that Sydney Water does not plan to remove these conditions in the upcoming pricing period and that those in hardship remain supported.

Figure A.4.1 Box 12.3 from Sydney Water's 2020 final report

Box 12.3 Sydney Water terms and conditions for late payment fees

Sydney Water will not charge a late payment fee where:

- there is a billing matter being considered by the Energy and Water Ombudsman NSW (EWON)
- the customer has made an arrangement with Sydney Water to pay by instalments or another payment plan
- part of the bill is being paid using Sydney Water's payment assistance scheme
- Sydney Water is aware that the customer has sought assistance from a community welfare organisation that is part of the payment assistance scheme
- the customer is registered with Sydney Water's BillAssist program
- the customer has been identified as being in hardship
- the customer pays by Direct Debit, or
- EWON has asked Sydney Water to waive the fee.

The fee will only be levied:

- if the customer has been notified in advance of the late payment fee and the circumstances in which it may be levied, and
- at least 7 days after the due date.

Source: IPART Final Report, Review of prices for Sydney Water Corporation from 1 July 2016 to 30 June 2020, p. 15.

4.2.2 Smart metering for greenfield

IPART has proposed reducing capex and opex associated with the delivery of our smart metering program. However, their draft decision is to approve the proposed smart meter charges for greenfield sites. It is unclear how practical this charge is given the removal of supporting opex that enables the asset. As this charge recovers the cost of installing the asset but not the digital systems that enable its customer benefits.

4.2.3 IOP (Interim Operating Procedure) Tankering charge

Under an IOP, wastewater from new properties is collected and held in reticulation mains or holding tanks before being extracted by road tankers for discharge at another location for treatment. In our original proposal we recommended that IPART set a regulated price of $22.65 per kilolitre that would apply if a tanker sought to discharge wastewater at one of three designated water resource recovery facilities.

In April 2025 we wrote to IPART to advise that the number of facilities would be reduced from three to two, which resulted in lower costs. However, we also revised the period of which costs would be recovered, from 80 years originally to a more realistic assumption of 15 years to better reflect likely demand for this service and proposed charging a price that remains constant in real terms for the next 10 years. With these changes, particularly the shorter recovery period, the proposed price increased to $28.34 per kilolitre. We also note the project has since been tested through our internal governance process, with approval to proceed to detail design and ultimately delivery.

In the draft determination, IPART has included a price of $23.09 per kilolitre, 1.9% higher than our original proposal but lower than the revised figures provided in April of this year. As there was no commentary in the draft report regarding the change, we request clarification from IPART in the final report regarding the change. Our recommendation for the final determination is for IPART to adopt the revised price of $28.34 per kilolitre.

4.2.4 Calculation of pensioner concessions

Sydney Water does not hold a position on whether pensioner concessions should change because of IPARTs draft report as this is a decision for the NSW Government to make. However, when setting pensioner concessions, we are currently limited by the existing billing system which was designed around the current approach. IPART's alternative approach of adopting $599 a year may conflict with these systems as rebates can only be set as a percentage of the service charge to whole numbers only (e.g. 100% of the water service charge). If Government ultimately adopts the recommended flat charge or another fixed amount there would be associated digital change costs which are factored in to Sydney Waters proposed expenditure allowance.

4.3 Form of regulation

IPART has proposed maintaining the existing conditions for Sydney Water's price control, that is to maintain the +/-5% DVAM materially threshold. While maintaining the status quo provides value for consumers in terms of regulatory certainty, Sydney Water questions the alignment of IPART's position and the requirements set out in section 4.7.3 of its *Water Regulation Handbook*. It is not clear how IPARTs draft decision has considered Sydney Water's engagement with its customers in Phase 6 of Our Water, Our Voice and has instead reached a position which appears to disallow alternative price controls that reflect customer preferences set out in Box 4.4.

While we accept IPART's draft decision, there may be scope to clarify within the Water Regulation Handbook what conditions might justify an alternative price control. Given that:

- There is an increased percentage of Sydney Water's revenue that is now variable and subject to windfall losses that were deemed unacceptable by our customers. Therefore, Sydney Water may explore a revenue cap in future regulatory periods.
- It is a costly and time-consuming activity to engage deeply and meaningfully with customers on price control.
- It is a regulatory requirement for utilities to engage with its customers if it wishes to modify its price control.

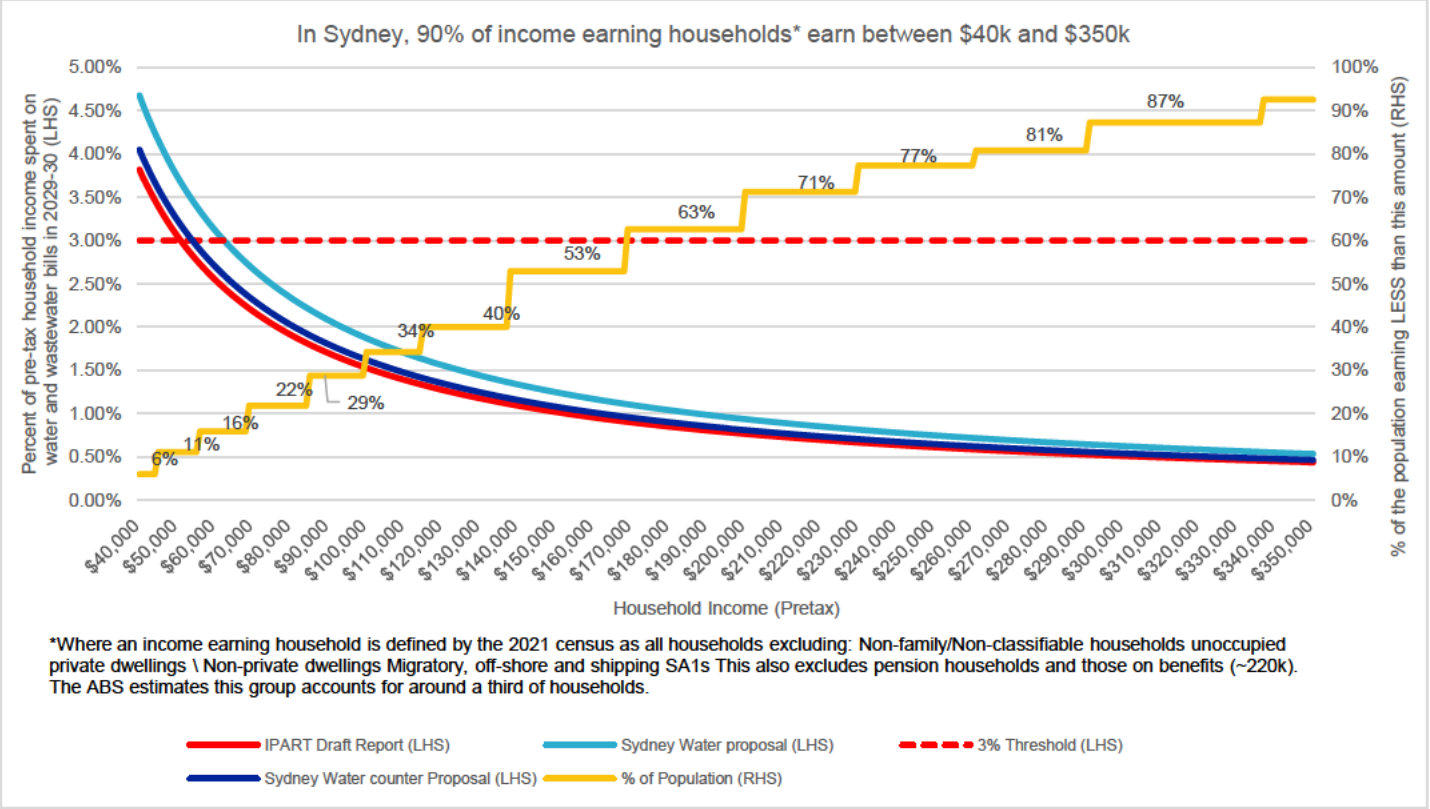
4.4 Assessment of affordability and rebates

The Premier's letter to IPART on 20 August 2024 asked them to assess affordability and to review the effectiveness of rebates. We welcome this analysis and IPART's acknowledgement in Section 10.2.3 that Sydney Water continues to offer services to assist customers in financial difficulty.

While we appreciate there is no perfect measure of affordability and that Sydney Water services a diverse customer base of over 5.4 million people, there are several flaws within the income analysis which appear to understate typical household incomes within Sydney Water's area of operations. Our analysis indicates that 90% of income earning household serviced by Sydney Water make between $40,000 and $350,000 per year.[124]

The distribution across this curve provides a more representative view of what affordability looks like for our customers. Less than 22% of households exceed the water stress threshold expressed in IPART's Draft Report. The below figure demonstrates the cuts made by IPART marginally shift some households out of water stress but tend to have negligible impacts to the median consumer despite the significant risks to these households' access to safe and reliable water and material risks to the environment.

Figure A.4.2 Levels of pre-tax household income spent on water bills across income levels



*Where an income earning household is defined by the 2021 census as all households excluding: Non-family/Non-classifiable households unoccupied private dwellings \ Non-private dwellings Migratory, off-shore and shipping SA1s This also excludes pension households and those on benefits (~220k). The ABS estimates this group accounts for around a third of households.

Therefore, we are of the view that the heatmap tables presented in IPART's draft report may overstate the improvements to affordability. Sydney Water does not believe this discredits the findings of Section 10 as their findings as there are cohorts described such as those on Jobseeker payments, renters and those on health care cards who are currently not eligible for rebates under Sydney Water's community service obligations.

With respect to community service obligations, Sydney Water acknowledges IPARTs recommended changes to its rebates. While it not set the conditions for these rebates as they are defined by NSW government it appreciates IPART's contributions towards Department of Climate Change, Energy, Environment, and Water's (DCCEEW) review. However, its final report the tribunal should consider revising their bill impacts table to reflect their recommendation as the draft report shows pensioner bill impacts under the existing policy conditions rather than the proposed $599/year nominal rebate.

124 Australian Bureau of Statistics (ABS) (2021) *Census of Population and Housing*, TableBuilder application for LGAs serviced by the wage price index.

Attachment 5: Performance and Accountability

Sydney Water developed three customer outcomes. Under each of these outcomes we proposed 4 or 5 objectives, and each objective has one or 2 performance metrics attached. IPART found that Sydney Water's proposed outcomes and objectives follow from customer engagement and are linked to customer priorities.

IPART has accepted the performance outcomes and objectives proposed by Sydney Water and suggested several additional measures and asked Sydney Water to consider if there are better ways to track performance in some areas. Sydney Water is open to reporting additional measures and improving some measures, where they are practicable to measure, easy for customers to understand and add meaningful insights. We note many of IPART's suggested measures are already reported elsewhere and consolidating measures in one place provides simplicity and transparency for our customers.

IPART asked us to set out targets for new measures. Sydney Water notes that there are some areas where it might not be appropriate to set targets, for example, setting a target to "Get customers off hardship" might create a perverse incentive to remove customers from its programs. Sydney Water proposes to review most of the targets we put forward in our *Price Proposal* based on the final expenditure outcome and would welcome further engagement with IPART to work out the targets and glidepath. Many of our proposed targets are at risk from reduced investment and may not be achievable as discussed in section #.

In the section below we clarify some measures and targets, where requested by IPART and comment on IPART's suggested additional measures.

5.1 We have modified some existing proposed measures and targets to reflect IPART's concerns

To strengthen the transparency of our reporting, we agree to review our methodology and clarify descriptions for some existing measures. We also agree that some measures reporting could be improved and have made suggested improvements where practicable. We have updated the targets and trends proposed for some measures where available. Table A.5.1 provides a summary of our proposed changes to customer outcomes measures, targets and trends. Our current view is that there are no suitable alternative measures the measures of public access and recreation, and natural area and green infrastructure land actively managed. We are open to continue to improve measures in the future, with insights from experts, customers and stakeholders.

Table A.5.1 Proposed changes (in red) to our performance measures, targets and trends

Outcomes and objectives	Performance measures	Target and trend	Comments on our response to IPART
Fair and affordable bills	**Affordability:** average residential customer bill as a percentage of average disposable income for the Greater Sydney region	Target ≤1.24% by 2030. Trend: Maintain (benchmark range)	We will update the target post final determination to reflect the final price path.
Positive customer experience	**Customer satisfaction:** position compared to benchmarked peers in an external survey of overall customer satisfaction (as measured by quarterly Brand Tracker Customer Survey customer rating, including consumers such as tenants, for overall service satisfaction of 8 or more out of 10)	Target: top quartile Trend: Maintain (benchmark range)	We have modified the measure description to clarify that consumers are included.
Informed and empowered customers	**Water literacy**: score (out of 10) from an external survey testing customers' understanding of water, where it comes from, how it is managed, and where it goes	Target: ≥ 5.75 out of 10 by 2030 Trend: Improve	We will update the target post final determination to reflect the final price path.
Safe swimming and recreation	**Public access and recreation**: annual increase in number of sites where our actions have improved community	Target: ≥ 7 extra sites by 2030 Trend: Improve	We have modified the description of measure to clarify Sydney Water's performance. We have revised the

Outcomes and objectives	Performance measures	Target and trend	Comments on our response to IPART
	access and amenity for recreation (including safe swimming and land-based recreation)		target to correct an error and will update this post final determination if needed.
Safe and clean water	**Drinking water quality:** percentage of drinking water samples meeting health-based guidelines	Target ≥99.9% each year Trend: maintain	We have amended the calculation methodology to more realistically measure our performance. We will target maintaining performance and will update it post final determination if needed.
Secure water supply	**Available water supply:** percentage of drinking water demand that can be met by rainfall-independent supply	Target ≥16% by 2030. Trend: Maintain risk level	We have lowered the target and trend due to SDPE deferral by government.
Saving water together	**Drinking water use:** residential drinking water use per person per day	Target <179 LPD by 2030 Trend: Maintain risk level	We have revised the target and trend due to change in water demand and will update it post final determination if needed.
	System leakage: percentage of drinking water supplied lost as leakage	Target ≤7% by 2030 Trend: Improve	We will update the target post final determination if needed.
Reliable water	**Water continuity**: percentage of customers affected by an unplanned water interruption for more than five hours	Target < 2% each year Trend: Maintain	We will update the target post final determination if needed.
Prevent pollution	**Quality of treated wastewater**: total number of non-compliances on amount (load) and concentration of wastewater pollutants and bypass from water resource recovery facilities.	Target: ≤ 9 by 2030 Trend: Progress to restore	We have amended the calculation methodology to more realistically measure our effluent discharge compliance beyond just core pollutants. We will target progress to restore compliance and update the target post final determination if needed.
	Pollution and environmental harm incidents: number of pollution incidents or other incidents that cause, or could cause, environmental harm. The types of different incidents will be reported on (mainly wastewater treatment and network incidents, also water and recycled water network, stormwater and other).	Target: ≤ 1053 Trend: Maintain (recent average weather performance)	We have modified the measure description to add that we will report different types of pollution and environmental harm incidents.
Recover resources	**Volume of recycled water available:** volume of our recycled water that is available for supply, including from treated wastewater and harvested stormwater (gigalitres (GL)/year).	Target: ≥ 62 GL/yr by 2030 Trend: Restore then improve	We have revised the trend to clarify this is restoring previous performance and will update the target post final determination if needed.
Cool, green, natural places	**Natural area and green infrastructure land actively managed**: percentage of Sydney Water land area with natural values and green infrastructure that is actively managed to maintain or improve its natural values and functions.	Target: ≥ 78% by 2030 Trend: Improve	We have modified the measure description to clarify what is meant by 'actively managed'.
Net zero carbon emissions	**Net zero carbon emissions:** volume of carbon emissions by scope 1 and scope 2 and net emissions (CO_2-e tonnes per year, where CO_2-e refers to 'carbon dioxide equivalent').	Target: Achieve net zero carbon emissions by 2030. Trend: Improve	We have modified the measure description to clarify that we will report separate values for scope 1 and 2 emissions.
Climate resilient systems	**Climate risk maturity health check:** Enterprise-scale level of climate risk management maturity rated through the NSW Climate Risk Maturity Health Check Tool	Target: Achieve advanced rating by 2030 Trend: Improve	No changes

5.2 Sydney Water accepts new measures where they are practical and provide meaningful insights to customers

As part of our *Price Proposal* engagement with our CCRG we identified measures to support all our objectives that were practicable to measure and related to the effects of our services, easy for customers to understand and add meaningful insights including joint initiatives like water conservation.

Although we already publish our performance against many of IPART's additional suggested indicators annually in our operating licence related reporting documents, we agree with IPART that additional measures would make our objectives reporting more comprehensive. We have selected a short list of measures to balance improving transparency and keeping our customer reporting simple and easy to understand, in table A.5.2. Because many of these measures are about providing additional insight and do not have targeted performance levels, we recommend that they be published as supplementary or contextual measures alongside the customer report card. We will consider insights from our engagement with customers and continue to engage on changes to our reporting approach with our CCRG.

Table A.5.2 Potential additional supplementary performance indicators

Outcomes and objectives	Supplementary performance indicators	Comments
Fair and affordable bills	Numbers of customers on payment assistance programs	We consider these measures are about providing additional insight and are not appropriate to have targeted performance levels. We provide further insights in annually in our Customer Compliance and Performance Report.
	Percentage of customer accounts 90 days in arrears as proportion of total accounts	
Positive customer experience	Number of customers that have had their services restricted because of non-payment per 1,000 customers	
	Number of complaints from customers and consumers to Sydney Water	
	Number of complaints that Sydney Water has resolved	
	Number of complaints reported to the Energy and Water Ombudsman NSW that are deemed to be Sydney Water's responsibility	EWON publishes data on complaints
Reliable water	Number of properties that experience a water pressure failure, per year	If IPART require a target, we consider it should be consistent with the existing system performance standard limits set out in our Operating Licence.
Recover resources	Percentage of solid waste materials recycled or reused as a percentage of solid waste generated by Sydney Water each year (excluding biosolids)	We provide further insights annually in our Environmental Performance Report. If IPART require a target we consider it should be updated post final determination.

5.3 Sydney Water is open to continuing to develop improved measures in the future through engagement with customers and stakeholders

Sydney Water does not propose to include some of the recommended measures as outlined below:

- Time in payment assistance programs (average and longest)
- Amount ($) in arrears
- Number of threats of restrictions, per 1,000 customers
- Time customers are restricted from supply
- Average time to resolve the complaint
- Number of emergencies and incidents reported to NSW Health
- Number of properties that experience 3 or more unplanned water interruptions that each last for more than one hour, per year

Reporting against the wide range of additional measures suggested may make the customer report card inaccessible or overly detailed. We do not support adding measures we do not currently track, or do not provide meaningful insight without additional context. For example, implementation of system capability to track time in payment assistance programs is difficult and would introduce additional costs to Sydney Water's customers outweighing the value of the measure.

We prefer to refer to relevant existing published reports rather than adding measures that are complex to explain to customers. For example, the number of emergencies and incidents reported to NSW Health is potentially confusing as it does not differentiate between potential or actual incidents and their severity. Sydney Water manages our incidents extremely well to avoid public health issues and we publish quarterly water quality monitoring including information about exception reporting on both drinking and recycled water quality monitoring.

We are open to continuing to develop improved measures in the future through engagement with customers and stakeholders.

Further details on our key changes and reasons for these are summarised below.

Fair and affordable bills

Sydney Water's proposal	IPART's draft view
Affordability: average residential customer bill as a percentage of average disposable income for the Greater Sydney Region	To better understand affordability within the community over time, IPART considers Sydney Water could also report on additional measures related to payment assistance, bill payments and restrictions.

We agree to report some additional measures that support our objective of fair and affordable bills. We will provide further insights in annually in our public Customer Compliance and Performance Report required under our operating licence. Our extensive customer engagement found that customers expect Sydney Water to consider the impact of higher bills on people who are financially vulnerable. Customers support Sydney Water and/or government helping customers in hardship and making customers more aware of the support we offer. In our view it is not appropriate to set targeted performance levels for these measures.

We also suggest that without additional context, the total dollar value amount in arrears does not provide meaningful insight about affordability. We have concerns about reporting threats of restrictions including time off supply due to complexities with these measures. Something to consider is this measure does not distinguish customers that have required payment assistance.

Positive customer experience

Sydney Water's proposal	IPART's draft view
Customer Satisfaction: measured position compared to the top-quartile of benchmarked peers in the quarterly Brand Tracker Customer Survey (an external survey), based on a customer rating for overall service satisfaction of 8 or more out of 10 Target: top quartile	Considers this metric is limited as changes in ranking can be driven by the actions of other utilities and industry changes, and the broad target (quartile) could hide changes in performance. Refers to the Justice and Equity Centre's submission noting that Sydney Water's current operating licence delineates between the terms 'customers' as referring to the landowner and 'consumers' which would include tenants IPART suggests that Sydney Water incorporates positive consumer experience into this customer experience objective. Sydney Water should consider how tenants, as users of its services, are included and represented in this objective and reporting metric. Sydney Water could provide more transparency into customer satisfaction by reporting on additional complaints measures

We consider every person and business that comes into contact with our products and services – not just those who are responsible for paying a water bill. Our Brand Tracker customer perception survey already includes tenants in residential customers surveyed. We agree with clarifying that consumers of our service, such as tenants, are included in this objective and our reporting measure of customer satisfaction.

We agree to report some additional measures that support our objective of positive customer experience. We do not support additional measures on average time to resolve complaints and systemic issues arising. Due to complexities in explaining performance against these measures, our view is these are better reported alongside further insights in our annual Customer

Compliance and Performance Report. Our view is that complaints to the Energy and Water Ombudsman NSW may be open to misinterpretation and suggest focusing on the proportion of these deemed to be Sydney Water's responsibility.

Safe swimming and recreation

Sydney Water's proposal	IPART's draft view
Public access and recreation: annual increase in number of sites with improved community access for recreation (including swimming). This includes sites managed by Sydney Water for temporary or long-term access and sites managed by local councils or agencies	Recommends the performance target reflect the Strategic Investment Plan goal of 10 new sites by 2030, Considers success (or not) against this target is likely to be strongly influenced by the actions of others, and is not a strong indicator of performance. Considers there may be scope to improve measurement of this objective such as number of recreational swimming sites with good or very good water quality Notes Sydney Water's Waterway Health Improvement Program and reporting on Sydney Water's impact on swimming locations. Refers to the Sydney Coastal Councils Group's suggestion of measures such as social amenity ratings. Asks that Sydney Water consider whether there may be another metric or metrics that better measures its performance in improving safe swimming and recreation.

We acknowledge the difficulty of finding a measure of safe swimming and recreation that clearly relates to the effects of our services on the community and environment. In response to feedback on our proposed measures from our CCRG, we included measures on joint initiatives where we work in partnership together with the community and customers. We propose to retain our existing measure and have further clarified the description and revised the target to resolve inconsistencies across our proposal and Strategic Investment Plan.

We utilised Beachwatch grades in customer consultation as it is the only measure available across most locations in our operational area and is easily understood by the public. We considered including a performance measure to report against Beachwatch grades as part of our proposal however there are significant limitations for Sydney Water using this as a performance target. We have little oversight of Beachwatch and the program funding is only confirmed for an additional two years. This measure also includes factors outside our control.

Whilst our Waterway Health Improvement Program contributes to improving water quality and public access at specific sites by collaborating with councils, our view is that a measure of this program would provide a limited view of how we improve recreation including swimming.

Sydney Water does not currently monitor water quality or quantify asset performance for recreational water quality across the whole operational area (there are examples of this being done in-part). Reviews underway of Sydney Water's monitoring activities as part of the EPL review could lead to opportunities to develop an improved measure in the longer term and we welcome further discussion with stakeholders and customers.

Safe and clean water

Sydney Water's proposal	IPART's draft view
Drinking water quality: percentage of systems where drinking water meets health guidelines.	Considers that this measure provides transparency and confidence to customers on their drinking water quality, however, there could be instances where the guidelines are not fully met. IPART recommends that to promote greater transparency, Sydney Water's customer reporting should also include the annual number of emergencies and incidents that required immediate reporting to NSW Health.

Safe and clean water is customers' top priority. Sydney Water has amended the calculation methodology of drinking water quality to be based on samples rather than systems. This will more realistically measure our performance and aligns more closely with reporting by other utilities. We consider our proposed target of ≥99.9% in each year of the pricing period as appropriate as it ensures we maintain compliance with the Australian Drinking Water Guidelines and continue to meet customers' priorities. This target reflects our proposed investment in drinking water quality in the 2025-2030 period and may require review to consider the outcomes of the final IPART determination.

Secure water supply

Sydney Water's proposal	IPART's draft view
Available water supply: Proportion of drinking water demand that can be met by RFIS. Target ≥ 33% by 2030. Trend: Improve	IPART noted that Sydney Water's initial forecast timing for the proposed Sydney Desalination Plant expansion may not be achievable given that the NSW Government has not yet made its decision on the expansion. To the degree that Sydney Water's proposed target reflects the additional desalinated water availability, the proposed target may not be achievable. Sydney Water may be justified in updating this in its response to our Draft Report.

Sydney Water accepts that our proposed 2029-30 target for proportion of drinking water demand that can be met by rainfall-independent supply is not achievable due to the delay to the planned expansion of the Sydney Desalination Plant. Secure water supply is a key priority for our customers so we will maintain this measure with a revised target, subject to the final determination decision and updated demand forecast.

Reliable water

Sydney Water's proposal	IPART's draft view
Water continuity: percentage of customers affected by an unplanned water interruption for more than five hours	IPART considers that to provide more detail on the types of interruptions that a customer might experience, Sydney Water should also report on: Number of properties that experience 3 or more unplanned water interruptions that each last for more than one hour, per year. Number of properties that experience a water pressure failure, per year.

We agree to report an additional measure of properties that experience water pressure failure, aligned with our Operating Licence standard. We don't support adding the measure 'number of properties that experience three or more unplanned water interruptions that each last for more than one hour, per year'. This measure is not a system performance standard in our Operating Licence. Customer engagement indicates customers are relatively accepting of water interruptions if their service is restored promptly.

Prevent pollution

Sydney Water's proposal	IPART's draft view
Public access and recreation: annual increase in number of sites with improved community access for recreation (including swimming). This includes sites managed by Sydney Water for temporary or long-term access and sites managed by local councils or agencies	Supports Sydney Water's proposed reporting of effluent discharge compliance and considers this provides a valuable insight to customers on waterway outcomes. Supports reporting on pollution incidents that could cause environmental harm, but considers that providing more detail to customers on the nature or severity of specific incidents would provide important context for customers to understand pollution impacts. Asks that Sydney Water propose an approach to report on different categories of incidents to provide more detail to customers on pollution incidents.

We acknowledge that several submissions noted the importance of reporting environmental metrics, including seeking metrics to help customers determine how the health of waterways would be protected or improved. We agree to provide additional information on types of pollution incidents that make up our measure of the total number of pollution and environmental harm incidents. Work underway in consultation with the EPA as part of the choke improvement pollution reduction program could lead to a measure of impact or severity in the longer term.

We are also proposing to more accurately reflect quality of treated wastewater performance by reporting compliance with a broader range of environmental protection licence limits. Going forward, as well as all core (controllable) concentrations we will include non-controllable concentrations, amounts (loads) of pollutants and bypasses. Our revised target of ≤ 9 non-compliances in 2029-30 is based on the total number of individual non-compliances rather than a percentage of facilities compliant. We consider this an appropriate target as it progresses towards restoring compliance (we forecast 29 non-compliances in 2025-26) and in alignment with customers' preferences, this target applies a medium cost, risk and performance profile for preventing pollution. It reflects proposed upgrades to treatment plants and realistic timeframes for implementation, the introduction of Hawksbury Nepean Nutrient Management Framework from 1 July 2025. forecast growth, and accounts for deteriorating performance at plants over time. It may require review to consider the outcomes of the final IPART determination.

Recover resources

Sydney Water's proposal	IPART's draft view
Volume of recycled water available: volume of our recycled water that is available for supply, including treated wastewater and harvested stormwater (gigalitres (GL)/year)	Consider there could also be merit in reporting the volume of drinking water saved by replacing non-drinking water uses with recycled water. Considers that this measure supports both this objective and 'saving water together' and aligns with customer comments for irrigation of public spaces using recycled water rather than drinking water and may be of value to customers. Notes the associated Strategic Investment Plan suggested reporting on the "percentage of waste materials recycled and reused (construction, office and operational) generated by Sydney Water each year (excluding biosolids)", with a target to improve from 79% to ≥85%. Requests that Sydney Water should clarify its intention with this performance metric.

We accept the merit in reporting the volume of drinking water saved by replacing non-drinking water uses with recycled water. However, this measure is based on actual recycled water supplied and assumptions around reduction in actual drinking water use replaced, rather than availability for supply. We also report on recycled water from providers other than Sydney Water such as councils. Our view is that more comprehensive insights are better available as part of our public Water Conservation Plan annual report.

We agree to include the measure related to solid waste from our Strategic Investment Plan, aligned with our Operating Licence indicator. At the time of submission, we included a performance target for this measure. Our view is that this measure is included as a supplementary indicator without a target. If IPART require a target we consider it should be updated post final determination.

Cool, green, natural places

Sydney Water's proposal	IPART's draft view
Natural area and green infrastructure land: Percentage of Sydney Water land area with natural values and green infrastructure that is actively managed.	Considers that the proposed metric could be better defined - it is not clear what is meant by 'actively managed' Notes that a significant increase in the target occurs when the Western Sydney stormwater facilities are developed, which may dilute or hide any other change. IPART suggests Sydney Water should consider whether there is a better way to measure the expected outcomes from the land being actively managed. Noted that Sydney Water already reports on indicators relating to native vegetation clearing, rehabilitation and gain, which may be an appropriate measure, although it is not clear if this aligns with Sydney Water's proposed actions.

Our current view is that there are no suitable better measure of the objective of cool, green and natural places. We are open to continue to improve measures in the future, with insights from experts, customers and stakeholders. We propose to retain our existing measure and have further clarified the description to clarify that the outcome of active management is to maintain or improve natural values and functions.

Sydney Water looks after a variety of natural areas, including bushland, wetlands, waterways, and naturalised stormwater channels. This measure shows how much natural assets Sydney Water manages and the different ways it cares for these areas. Customers value nature and want Sydney Water to protect and improve natural places.

A site is actively managed if Sydney Water is doing planned work to protect or restore the natural values and functions, based on a formal plan of management. This work is tailored to each site's needs and may include: weed removal, stormwater control, sediment removal, revegetation and maintenance of new planting, and predator control.

Measures such as such as vegetation loss or gain, percentage weed free or other examples we have considered do not reflect the full range of natural assets activity undertaken by Sydney Water on its own land.

Yarra Valley Water has a similar measure of "hectares of land we actively manage to preserve and restore biodiversity and natural habitats". As our proposed measure is based on the proportion of lands actively managed we disagree that Western Sydney stormwater facilities may dilute or hide other changes. The significant increase in our forecast target is due to restoring adequate managed activities at our existing natural assets.

Net zero carbon emissions

Sydney Water's proposal	IPART's draft view
Net Zero carbon emissions (tCO2): volume of Scope 1 and 2 carbon emissions (CO2-e tonnes per year, where CO2-e refers to 'carbon dioxide equivalent')	The Justice and Equity Centre considers there should be a target relating to Sydney Water's performance in minimising its own emissions rather than offsetting them. IPART considers that Sydney Water's customer reporting could include separate values for scope 1 and scope 2 emissions

We agree to provide additional reporting on scope 1 and scope 2 emissions and net emissions reductions to provide greater clarity on our performance in minimising emissions. We already report these details in our public annual report on Progress towards achieving net-zero emissions as required under our Operating Licence. We will keep our proposed target at total net emissions. Setting a target for scope 1 will not change the outcome as these emissions generated by the water industry are hard to abate. We are currently investigating emission reduction opportunities however offsets will be needed for the short term.

Attachment 6: Addressing the Changing Revenue needs of Sydney Water

This attachment provides further detail into the proposed tools to manage changing revenue needs detailing:

- **That we choose the right tool for the job**: To recover necessary investments above IPART's base allowance in a way that shares risk appropriately between Sydney Water and its customers.
- **That the recommended tool passes IPART's tests and principles** as outlined in Section 5 of the Water Regulation Handbook
- **How Sydney Water recommends this tool to function:** Where appropriate, as there is some additional complexity associated with some measures compared to ex-post review.

Figure 5.2 of the Handbook provides six tests that can be used to determine the best instrument for managing changing revenue needs. This section tests each of our proposed mechanisms against the list of these tests.

In applying these tests, Sydney Water is concerned that the framework has shifted towards one which favours placing greater risk on Sydney Water. We support this in principle where Sydney Water is better placed to manage the risk. However, we consider there are clearly opportunities where in-period adjustments may encourage a better outcome for customers, for example, avoiding the need to build uncertain costs into baseline allowances and minimising the degree of intergenerational inequity into our regulatory model. We query whether in IPART's upcoming WACC review, these considerations should be made in assessing the relevance of existing assumptions such as equity beta.

6.1 Bulk water prices

Our 2025-30 bulk water allowance is set using current prices set by IPART. For Sydney Desalination Plant (SDP) this ends 30 June 2027, and for WaterNSW, this is expected to end 30 June 2028. Based on the outcomes of these future reviews, changes in prices will result in Sydney Water under- or over-recovering its efficient costs. IPART's draft decision proposes to solve this issue by truing-up this difference in the following regulatory period.

We accept IPART's draft decision (although we recognise that one of our proposed options for managing SDP cost risk by re-instating the cost pass-through would mean the following only applies to WaterNSW). In reviewing IPART's tests, we note that this would be a strong candidate for a cost pass-through:

- **Trigger event**: We consider implementation of IPART's Final Determinations for WaterNSW and SDP constitute clear trigger events.
- **Efficient costs**: Prices in WaterNSW and SDP's future Final Determinations can be netted from prices under the existing Final Determinations to determine the difference in Sydney Water's efficient bulk water costs.
- **Materiality**: While it is not currently possible to forecast the impact that the future Final Determinations will have on our prices, we are concerned that these businesses are experiencing a similar increase in efficient costs since their last reviews as ourselves. For instance, an increase in prices of only 5% could increase our annual bulk water costs from the $481 million allowance in IPART's Draft Determination by $24 million.
- **Efficiency and equity**: Given the inability to accurately forecast the precise impacts of these future Final Determinations, we consider there is little efficient means to insure ourselves against this cost risk. We also do not consider it is appropriate to charge our customers in our baseline allowances to reflect a guess of where these costs may end up.
- **Symmetric**: In determining our efficient costs, there can be a symmetric treatment of over- and under-recoveries, depending on how prices change in WaterNSW and SDP's future Final Determinations.
- **Efficient cost of service**: Passing through costs to reflect changes in efficient bulk water costs ensures prices to our customers are most reflective of the efficient cost of service. However, a true-up would only defer recovery for a handful of years depending on how the true-up in recovered through prices in 2030-35. This is unlikely to create a significant intergenerational equity concern.

In accepting this approach, we note that if WaterNSW or SDP's prices increase as a result of these reviews, the true-up will add to any price spikes in 2030-35. We urge IPART to consider this in the context of its other draft decisions to defer expenditure in allowances, to include other true-ups, and any possible increase in prices in 2030-35 from exogenous drivers such as the WACC.

6.2 Bulk water volumes

Our 2025-30 bulk water allowance is determined using water demand forecasts set by IPART. Similar to bulk water prices, variation in volume results in Sydney Water over- or under-recovering its efficient bulk water costs.

Under the current price cap framework, Sydney Water holds demand risk on volumes it purchases from WaterNSW. Given the maintenance of the Demand Volatility Adjustment Mechanism, this risk is capped to 5% of water sales revenue, whereby water sales revenue varying more than 5% from forecasts are trued-up in 2030-35. In contrast, Sydney Water holds no risk on SDP production requests, recovering it all via a cost pass-through the following year (through water usage charges during Drought Response Days, or water service charges outside these days).

6.2.1 Shoalhaven

We support IPART's draft decision to maintain the Shoalhaven Transfer fixed service charge cost pass-through.

6.2.2 WaterNSW

We accept IPART's draft decision, wherein Sydney Water continues to hold some demand risk over WaterNSW charges. Reflecting on the application of the relevant tests within IPART's framework:

- **Efficient costs**: Efficient costs can be calculated for WaterNSW, based on the difference between WaterNSW's actual charges to Sydney Water and the revenue already included in our baseline allowance
- **Materiality**: However, like the past five-years, we expect to be able to wear differences between forecast and actual water demand.
- **Efficiency and equity**: Our bulk water allowances intend to provide a reasonable forecast of efficient charges paid to WaterNSW for bulk water. Variations to this depend on outturn water demand throughout the period.

However, we note that under IPART's current settings, the actual charges we pay to WaterNSW depend on the volumes we purchase from SDP:

$$Volumetric\ charge_{WNSW} = \frac{20\% \times Total\ Revenue_{WNSW}}{Forecast\ Sales_{WNSW} - Quantity_{SDP}} + \frac{Shoalhaven\ Transfer\ Cost}{Actual\ Sales}$$

All else equal, this results in Sydney Water paying WaterNSW the same amount for volumes it offsets using water produced by SDP – effectively paying twice as this is in addition to paying additional SDP water usage charges. Under the current settings, these additional costs would be worn by customers through the SDP cost pass-through so that Sydney Water is not penalised when it requests operation of SDP to maintain water supply. We discuss this below.

We query whether this is an appropriate outcome for our customers.

6.2.3 Sydney Desalination Plant

We do not support IPART's draft decision to remove the SDP cost pass-through as we consider it meets the requirements in the Water Regulation Handbook:

- **Trigger event**: We disagree with IPART's characterisation of there being no clear trigger event. Despite operating flexibly, our production requests to SDP are set based on the Decision Framework. We are required to operate SDP at full capacity when dam levels reach 75% – with variations documented in Emergency Request Notices (ERNs). While we have submitted 17 ERNs in the past, these were predominantly required to request SDP operate the plant at minimum flow.

  Sydney Water has no control over when dam levels fall below 75% or when Sydney Water must respond to events resulting in an ERN. Sydney Water has some control over critical maintenance that require greater SDP operation.

However, this only contributes to a small percentage of the expected higher production levels, and IPART's draft decision on bulk water costs have already shifted the forecast number of days for these events.

- **Efficient costs**: We agree with IPART that efficient costs can be calculated for SDP, based on the difference between SDP's actual charges to Sydney Water and the revenue already included in our baseline allowance.
- **Materiality**: We consider this constitutes a material cost risk.
- **Efficiency and equity**: As discussed in relation to the efficient cost of service below, our Decision Framework is designed so that Sydney Water must request operation of SDP in the long-term interests of customers. As a result, the cost pass-through reflects the most efficient and equitable means of recovering costs of operating SDP.
- **Symmetric**: We agree with IPART's assessment that the mechanism is symmetrical since the cost pass-through calculates the actual costs, less the expected revenues and avoided costs, to be recovered (or returned) from all water customers through the mechanism.
- **Efficient cost of service**: While we recognise IPART's intention to provide a financial incentive to Sydney Water to influence the Decision Framework on behalf of its customers, any changes we – or other decision makers – would make would not be in the long-term interests of customers.

  Notably, the requirements under the Decision Framework to request maximum production of SDP at 75% dam levels and to respond to ERNs are underpinned by cost-benefit analysis conducted by the Centre for International Economics and WaterNSW.[125] Their analysis identifies these as critical points to maximise the social benefit from operating SDP to reduce the time spent in and severity of water restrictions, and to minimise the risk of running out of water. As such, a cost pass-through would simply enable the cost of servicing the SDP in the long-term interests of customers.

Nevertheless, we understand IPART's interest in minimising the number of cost pass-throughs. As an alternative to re-instating the SDP cost pass-through, we urge IPART to lift the drought trigger to 75% or per the drought indicator dashboard underpinning the Greater Sydney Drought Response Plan (which set similarly objective criteria that Sydney Water does not have control over), when we are expected to need to operate SDP at full capacity. We outline this below, and we would be keen to work with IPART to discuss this further.

True-up SDP pass-through costs related to the deferral year in 2025-30

Under our current determination, we are allowed to pass through actual SDP costs incurred in the previous year into the water service charge using the SDP adjustment formula. We seek clarification regarding how Sydney Water can fully pass-through the costs:

- accumulated between 1 April 2024 and 31 March 2025 under the existing mechanism:
  - The 3 months deferral adds a layer of complication as it means we can recover (during July to September 2025) only a portion (around 25%) of these costs as the new determination would commence 3 months into our revenue recovery (note that the existing SDP price adjustment formula assumes recovery over a full year). That means on the face of it, we will be under-recovering 75% of our 2024-25 SDP true up unless a specific recovery mechanism is put in place.
- accumulated between 1 Apr 2025 to 30 September 2025:
  - These costs face the same issue as they are subject to the current determination, but we would not be able to pass through the under- or over-recoveries to customers as the new determination prices will apply, unless a specific recovery mechanism is implemented per above.

125 Specifically, the CIE's analysis demonstrated that continuous operation of SDP was the most cost effective way of increasing our yield using Rainfall Independent Supply and delaying the cost of restrictions. WaterNSW's analysis identified the appropriate storage levels.

6.3 Drought

During drought, Sydney Water incurs greater costs to operate its network, such as implementing water conservation measures and running SDP at maximum capacity. In conjunction, efforts to reduce customers' water use reduces water demand, reducing the revenue we recover to operate our business. To address this concern, IPART proposes to maintain a drought usage uplift, ensuring that Sydney Water recovers a forecast of efficient costs during drought. For customers, this ensures that the costs they pay reflect the efficient costs of the services they receive. Additionally, the drought uplift on water usage charges provides a stronger financial incentive for customers to reduce their water use. IPART defines this drought trigger at 60% dam levels.

We support maintaining a drought pricing mechanism and thank IPART for the improvements made to our drought price calculation. However, as noted previously, we request that IPART consider amending the drought trigger to 75% or per the drought indicator dashboard underpinning the Greater Sydney Drought Response Plan if it does not accept our SDP cost pass-through.

Notably, this drought trigger would be better aligned with assumptions underpinning the draft price in IPART's draft decision. That is, the driver for the decrease in the drought uplift for the 2020-24 period ($0.94/kL) and the draft decision for 2025-30 ($0.54/kL) was a change in assumption by Sydney Water that meant Sydney Water would bear greater drought risk instead of its customers. Specifically, for the purposes of calculating the drought price, water demand during drought was assumed to decrease in line with level two water restrictions (-10%) regardless of how deep drought becomes. This replaced the assumed reduction in water demand according to level three water restrictions (-17.5%) used in 2020. However, this balance of risk was contingent on Sydney Water being able to recover its SDP costs during early drought (when dam levels were above 60%) under the existing cost-pass through.

6.4 Growth servicing

As noted elsewhere in our response, the difference between our *Price Proposal* and IPART's draft decision on our growth servicing capital allowance is largely driven by uncertainty over the outlook for development between now and 2030. Historically, if we were required to invest beyond this allowance, we would have done so to meet our compliance obligations and the needs of Sydney's growing city while seeking recovery at the next determination.

While this approach has protected customers in the past from bearing the cost of uncertain development, the scale of unfunded growth is now much higher. We recognise that there is an opportunity to leverage alternative funding mechanisms to minimise the upfront cost impacts to customers, potentially resulting in a more balanced approach to funding our growth servicing investment requirements.

We outline our initial assessment of these approaches against key outcomes in Table A.6.1. While a combination of Options 1 and 4 (with Sydney Water historically bearing some of the loss in-period) is typically used under the current regulatory settings, introducing Option 2 would minimise the incentive to defer growth investment. Option 3 would achieve a similar objective, but we recognise IPART's concern with cost-pass throughs, particularly given the uncertainty around developing an ex-ante cost forecast to pass-through. We request that IPART consider working with us to further develop such mechanisms.

Table A.6.1: Options assessment against relevant regulatory outcomes

	Option 1: Include costs in base allowance	**Option 2:** Annual true-up in-period	**Option 3:** Cost pass-through in-period	**Option 4:** True-up in following regulatory period
Mechanism	Recovery upfront, including ICs forecast.	Annual correction based on actual costs and ICs.	Annual update based on upfront agreed costs and ICs on occurrence of agreed trigger event.	Efficient costs recovered as part of the 2030-35 determination.
Bill impact	Higher price upfront based on the forecast growth capex.	Lower initial prices, but prices would change to reflect actual (or prudent) investment.	Lower initial prices, but prices would change to reflect agreed allowance linked to growth needs.	Minimises price impact in 2025-30.
Allocation of financing risk	Customers take on more financing risk.	Minimises financing risk to Sydney Water as it recovers actual (or prudent) costs.	Reduces financing risk to Sydney Water as it recovers its original allowance if growth proceeds if trigger event (or prudence test) occurs.	Sydney Water bears greater risk of financing growth, resulting from the lower in-period allowance.
Incentives to invest efficiently	Sydney Water still bears the risk of financing growth in excess of its allowance.	Aligns incentive for just-in-time investment by Sydney Water.	Improves incentive for just-in-time investment by Sydney Water.	Reduces incentive for just-in-time investment by Sydney Water.
Transparency and simplicity	May not be seen to address affordability issues for customers.	Requires an annual review that would result in prices being adjusted each year in arrears.	Prices need to be adjusted annually, including a potential review. Does not directly align with IPART's pass-through mechanism.	True-up may contribute to jump in prices in 2030-35.

6.5 Changing compliance requirements

Our original proposal noted a range of likely changes in compliance requirements that Sydney Water chose not to provision for in its capital and operating expenditure proposals to IPART, such as:

- NSW EPA: Stage 2 Concentration and Load Limit Review
- NSW EPA: NSW Biosolids Regulatory Review
- Safe Work Australia: Workplace Exposure Standards Review
- NSW Health: Disinfection By-Products Review

Responding to changes in our operating environment by reprioritising our expenditure allowance is a key feature of our regulatory framework. While we do not seek an in-period allowance or regulatory mechanism to account for the difference in efficient costs to meet these specific increases in compliance obligations, we note that these are other areas Sydney Water may explore as true-ups subject to ex-post reviews in the following period. Reflecting on the application of the relevant tests within IPART's framework:

- **Trigger event**: Implementation of any uplift in requirements to Sydney Water from these reviews appear to constitute a clear trigger event.
- **Efficient costs**: While the efficient costs in responding to these events can be ascertained, it will remain unclear until these reviews have been conducted by the relevant authorities.
- **Materiality**: As above.

6.6 Cost of debt

While IPART's draft decision was silent on the cost of debt true-up over the upcoming period, we understand that IPART intends to maintain the current approach. This ensures that Sydney Water wears the financing risk of changes in efficient debt costs during the period, but that any over- or under-recoveries are trued-up in the 2030-35 period.

6.7 Future deferrals

6.7.1 Deferral year inflation adjustments

Our current determination was intended to continue until 30 June 2024. In deferring our price review by one year, IPART advised water businesses that prices were to be maintained at their nominal levels between 2023-24 and 2024-25. We understand that legal limitations set by their 2020 Determinations prevented IPART from allowing businesses to make these inflation adjustments.

Our experience from the recent deferral is that average annual residential customer bills over 2025-30 could have been reduced by approximately $9 if prices were allowed to be escalated by inflation for 2024-25 and therefore a lower revenue shortfall needed to be trued up over 2025-30. Doing so would have also provided a marginally higher baseline bill in 2024-25 that we estimate would have reduced the increase in bills in 2025-26 from 6% real to 2.3% real, all else equal.[126]

We ask IPART to consider whether its final determination should include a clause (or other adjustment) to allow businesses to increase prices by inflation in the case of future price review deferrals. While the recent deferral demonstrated that Sydney Water will likely be able to wear this risk in future and true it up in the following period, we are concerned that this can exacerbate bill shocks to customers as it has in the current review.

6.7.2 Deferral year true-ups

While IPART's draft decision was silent on true-ups in the case of future deferrals, we understand that IPART intends to considering the same approach in future. This ensures that Sydney Water wears the financing risk of price review deferrals (subject to some allowance for inflation, requested above), but that any over- or under-recoveries compared to IPART's calculation of the notional revenue requirement for those deferral years are trued-up in the future period.

126 Our typical customer bill in 2023-24 is $1,220. Allowing the increase in the deferral by March inflation would have increased bills to $1,263 (3.6%). IPART's forecast bill for 2025-26 in $2024-25 is $1,293. An increase from $1,263, rather than $1,220 would have reduced the jump in bills needed between periods, providing a smoother increase to customer bills.

Attachment 7: Hawkesbury City Council Wastewater Assets

In response to IPART's request, we outline the key details on the acquisition of wastewater infrastructure from Hawkesbury City Council (HCC). We are keen to work with IPART to finalise its approach and are happy to provide detailed information on request. It is anticipated that subject to relevant approvals and commercial terms that a transition of responsibility would occur from 01 July 2026.

7.1 Social and environmental benefit

The proposal to integrate HCC's wastewater services into Sydney Water's broader network delivers significant long-term social and environmental benefits.

7.1.1 Environmental stewardship and compliance with the Hawkesbury-Nepean Nutrient Framework

Through our engagement program 'Our Water, Our Voice' our customers placed significant importance on waterway health and the environment. HCC integration supports Sydney Water's commitment to improving the health of the Hawkesbury-Nepean River and achieving compliance with the Hawkesbury-Nepean Nutrient Framework (HNNF). While the existing HCC wastewater treatment plants will not be fully compliant until substantial upgrades are completed, Sydney Water's stewardship ensures a clear and credible pathway to compliance. This approach benefits the Hawkesbury-Nepean River ecosystem, reducing nutrient loads and improving water quality over time. The protection of our sensitive waterways is for the benefit of all members of our community and for future generations.

The EPA's support for a single operator managing the Sackville zone of the Hawkesbury-Nepean River reinforces the environmental certainty and simplicity of this approach. A unified management structure under Sydney Water enables more consistent monitoring, reporting, and delivery of environmental outcomes supported by the efficient management of investment to meet the desired goals.

7.1.2 Customer, community, and public health benefits

The HCC scheme is the last remaining Council-operated scheme in Sydney, with other similar schemes being integrated into Sydney Water's networks decades ago. This has resulted in an inequity of servicing standards and costs over the years. The topic of customer affordability is a critical issue for our customers. HCC customers currently face wastewater bills that are approximately double Sydney Water's postage stamp price. If not integrated into the broader Sydney Water network and ongoing operations, funding the necessary upgrades could result in HCC's wastewater bills doubling again – potentially reaching four times the cost paid by Sydney Water customers. Integration avoids this unsustainable financial burden on a small customer base and ensures equitable access to affordable wastewater services.

Beyond affordability, the integration supports public health outcomes by ensuring consistent treatment standards, reducing the risk of system failures, and improving sanitation infrastructure. This is particularly important in flood-prone or environmentally sensitive areas along the Hawkesbury-Nepean River.

7.2 Why Sydney Water is better positioned

Sydney Water is uniquely positioned to deliver wastewater services to the HCC wastewater customers in a way that is both cost-effective and environmentally sustainable. This is due to its scale, expertise, and ability to integrate the HCC scheme into a broader, more efficient network.

Sydney Water services over 5 million users daily across Sydney, the Blue Mountains and the Illawarra. It operates about 30 water resource recovery facilities, over 600 sewage pumping stations, and around 25,000 kilometres of sewers and pipelines. As a result of this extensive operation, Sydney Water brings:

- Established expertise in planning, customer service, and environmental compliance, with a proven track record of delivering complex infrastructure projects across Greater Sydney.
- Operational scale that allows for more efficient delivery of services and infrastructure upgrades, reducing per-customer costs through economies of scale.
- Integrated systems that enable better coordination of environmental outcomes, particularly along the Hawkesbury-Nepean system, where Sydney Water already manages interconnected assets.
- Regulatory credibility, with strong support from the EPA for a single-party management model in the Sackville zone, which simplifies compliance and improves accountability.

HCC's wastewater infrastructure requires significant capital investment to meet environmental standards, particularly under the Hawkesbury-Nepean Nutrient Framework (HNNF). Sydney Water can deliver the required upgrades at a lower cost per customer by leveraging its existing systems, workforce, and capital planning processes. This ensures that the necessary improvements are made without placing an unsustainable financial burden on a small, standalone customer base.

This does not reflect poorly on HCC, but rather acknowledges the structural limitations of a small utility operating in a high-regulation environment. Integration with Sydney Water offers a fair, efficient, and sustainable path forward for all stakeholders.

7.3 Cost to Sydney Water

In **Table A.7.1**, we provide the forecast expenditure of operating HCC's services. Broadly, this expenditure will deliver upgrades to the McGraths Hill and the South Windsor wastewater systems currently operated by Council. We would be happy to brief IPART on the breakdown of this expenditure if it would like further detail.

Sydney Water has prepared a 10-year capital and operating expenditure forecast to support the integration of Hawkesbury City Council's (HCC) wastewater assets. These forecasts reflect the necessary investment to bring the infrastructure up to current regulated environmental requirements and operational standards, while ensuring cost efficiency and value for customers.

7.3.1 Ensuring cost efficiency

To ensure the proposed expenditure is efficient, Sydney Water has reviewed HCC's historical operating costs and applied Sydney Water's benchmarks. This analysis has informed our approach to identifying areas where efficiencies can be achieved through integration. Key steps taken include:

- Due diligence and options assessment: As part of the acquisition process, Sydney Water reviewed multiple delivery options and asset strategies to determine the most cost-effective pathway.
- Integration of asset operations and maintenance activities with existing resources managing adjacent systems, such as Richmond and Riverstone wastewater networks.
- Leveraging existing contracts and scale: Sydney Water will utilise its existing supplier and delivery contracts, which benefit from economies of scale and competitive pricing. This approach reduces procurement overheads and ensures consistency in service delivery.
- Operational learnings: Our experience managing similar wastewater infrastructure across Greater Sydney has informed our planning and delivery approach. This includes optimising maintenance schedules, treatment processes, and asset renewal strategies.

These measures collectively ensure that the integration is delivered in a financially responsible manner, without placing undue burden on customers.

7.3.2 Scope of works

The forecast expenditure will support a range of upgrades and transitions across the HCC network, including:

- South Windsor Wastewater Treatment Plant: Targeted upgrades to improve treatment performance and align with environmental compliance requirements under the Hawkesbury-Nepean Nutrient Framework.
- McGraths Hill transition [redacted]

- Network upgrades: Replacement and refurbishment of ageing assets across the HCC network and integration into Sydney Water's systems to improve reliability, reduce risk of failure, and support long-term service sustainability.

These works are essential to achieving compliance, improving environmental outcomes, and ensuring equitable service standards for HCC customers.

7.4 Bill impact to Sydney Water customers

Work is ongoing to finalise the estimated bill impacts of acquiring HCC services. We estimate that the acquisition will increase the average annual bill for a typical residential customer by an average of $1-$2 over the 2025-30 period.

7.5 Pathway to recover costs

Sydney Water supports integrating HCC wastewater customers into its broader network under a unified postage stamp pricing approach as our investment in the scheme aligns with environmental outcomes our existing wastewater customers contribute to.

7.5.1 Options for cost recovery

We recognise that the Tribunal may consider two primary mechanisms for recovering the costs associated with integrating HCC's wastewater services:

1. **Inclusion in baseline prices and revenue:** Under this approach, the forecast integration costs would be incorporated into Sydney Water's regulated revenue base. If the integration does not proceed, or if the integration is brought forward or deferred, a negative revenue adjustment would be applied to account for any net present value notional over-recovery during the 2025-30 period. Balancing the impact to our customers' bills with the additional pricing predictability and stability from this method, we consider that this approach will be in the best interests of our customers
2. **Cost pass-through mechanism**: Alternatively, Sydney Water may seek to recover costs through a cost pass-through arrangement. This would allow for more flexible cost recovery of our forecast costs, ensuring that the costs customers pay at any point in time reflects the actual efficient cost of providing our wastewater services. Our initial assessment suggests that a possible trigger event would be based on when contract execution occurs. We would be happy for this to also be subject to some form of ex-post review by IPART in the future review. While cost pass-throughs can be appropriate in specific circumstances, Sydney Water acknowledges the Tribunal's general caution around their us.