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Your submission for this review:
Meriton Group Submission to IPART - In response to prices for Sydney Water Corporation from 1 July 2025 TOWARDS MORE EQUITABLE TARIFFS FOR MULTI-UNIT RESIDENTIAL BUILDINGS Sydney Water has submitted a proposal for price increases across the 2025-30 regulatory period to IPART that include a 103% increase in fixed tariffs and 18% higher usage charges in a departure from the principles of user pays pricing. This report evaluates the proposed and recommends changes to establish a fair and equitable tariff structure for multi-unit residential buildings. The report also describes the current situation and challenges that multi-unit residential building developer and building owners are facing, especially in capital expenditure, construction delays, as well as operating expenditures. This is concerning at a time when Sydney faces a housing crisis, with multi-unit apartments playing a growing role in housing supply but encountering financial barriers under the current arrangement. The report proposes four (4) key changes in price regulation to improve the equity of the services provided within multi-unit buildings and these changes would create an equitable pricing structure, support affordable housing, and promote sustainable water use across Greater Sydney.

urban WaterCycle Solutions
Independent research and consulting

Meriton Group Submission to IPART

In response to proposed prices for Sydney Water Corporation from 1 July 2025

Towards more equitable tariffs for multi-unit residential buildings

9 December 2024

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Independent research and consulting

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About the Author

Professor Peter Coombes

Peter Coombes is a director of Urban Water Cycle Solutions, an honorary and visiting professor in Crawford School of Public Policy at the Australian National University, a Fellow of Engineers Australia and Certified Practicing Engineer in Civil and Environmental Engineering, Leadership and Management at the Engineering Executive (EngExec) level. He was awarded the 2018 GN Alexander Medal for scientific contributions to Hydrology and Water Resources and the 2019 Presidents Medal for his role as a lead editor of the Urban Book of Australian Rainfall and Runoff. Peter holds a PhD in Civil and Environmental Engineering, degrees in Civil Engineering (Hons), Surveying (Hons) and Economics, and a Diploma of Legal Studies.

Peter was recently the Associate Dean (Education) and Professor of Water Resources Engineering at Southern Cross University. He is a Member of Systems Research Steering Committee at Imperial College London and is an editor the Urban Book of Australian Rainfall and Runoff published by Engineers Australia. He has held senior academic positions at University of Newcastle, University of Melbourne and Swinburne University. Peter was a Chief Scientist in the Victorian Government and contributed to inquiries into stormwater management and flooding by the Senate of the Australian Parliament and into water resources by the Productivity Commission.

Peter was a managing director of Bonacci Water, a member of the water advisory group to the Prime Ministers Science, Engineering and Innovation Council, the advisory council on alternative water sources for the Victoria Government's Our Water Our Future policy, a member of the advisory panel on urban water resources to the National Water Commission, an advisor on alternative water policy to the United Nations and a national research leader of innovative WSUD strategies in the eWater CRC. He has generated over 250 scientific publications and designed more than 120 sustainable projects including settlements that generate all their water resources and manage flooding. Professor Coombes was also a co-author of Australian Runoff Quality and a former chair of the Stormwater Industry Association. More information can be found at http://urbanwatercyclesolutions.com

Executive Summary

The Independent Pricing and Regulatory Tribunal (IPART) regulates the tariffs that Sydney Water can levy on the properties for the provision of water, sewage and stormwater services. These tariffs vary with the type of property that purchase the services.

Sydney Water has submitted a proposal for price increases across the 2025-30 regulatory period to IPART that include a 103% increase in fixed tariffs and 18% higher usage charges in a departure from the principles of user pays pricing.

The proposed price regime results in low water using units paying as much as $19/kL (2024-25) and $36/kL (2029-30) for water and wastewater services. This is a disincentive to reduce water use and improve the resilience of Sydney.

Residential units and apartments are an increasing proportion of housing stock (31%) in Greater Sydney and contribute the increasing water efficiency of the region. There is a shortage of rental apartments in Greater Sydney resulting in higher rents.

Sydney is experiencing a crisis in housing supply and affordability that coincides with unusually weak growth in wages. The housing industry is experiencing record low approvals and completions which increases the prices of housing and rents. The provision of rental apartments in multi-unit buildings also encounters substantial financial barriers which impacts on the availability of affordable housing.

It is not an ideal time to increasing the costs of providing housing and the costs of living in housing whilst removing the user pays opportunity to reduce water use and associated Sydney Water bills.

This report proposes four key changes to price regulation to shape a more equitable tariff structure for multi-unit buildings.

Background

Meriton Group provide residential apartments for rent in multi-unit buildings. As the building owner and landlord, they pay the tariffs for water, sewage and stormwater services on behalf of tenants. The only costs that can be passed on to the tenants of units is for water usage where individual meters are installed.

Professor Peter Coombes from Urban Water Cycle Solutions was commissioned by Meriton Group to provide advice and assistance on reviewing Sydney Water's tariffs to support an application to IPART for a more equitable pricing structure. This report includes feasibility analysis and economic modelling of multi-unit buildings, commercial buildings, detached housing and the provision of water utility services.

Essentially the owner and operator of the multi-unit building provides services to tenants via the "private" water and sewage networks within the buildings and pay Sydney Water for those services. The owner of new multi-unit buildings is required to

install plumbing for meters to each unit and pay for the supply and installation of individual meters to each apartment. However, Sydney Water provides individual water meters for housing in greenfield developments at their cost.

A Building Owner of multi-unit buildings provides all the local services to tenants within the buildings. This is different to the relationship between a landlord and a tenant for a single residential dwelling that receives services from others.

These local services include provision, operation, maintenance and replacement of distribution infrastructure within buildings. The Building Owner is responsible for the commercial risk and depreciation of this local distribution infrastructure. Each unit is also provided with water meters and associated plumbing. All local administration of accounts, inquiries, requests for assistance and complaints by tenants are also provided by the Building Owner.

In contrast, the owner of a commercial building, such as offices, shopping centres, retail shops and hotels, pay fixed and usage tariffs at the master meter for services provided by Sydney Water to the property boundary. Note that the commercial rates also include a sewage usage tariff that is based on the metered water use and the assumed sewage discharge factor.

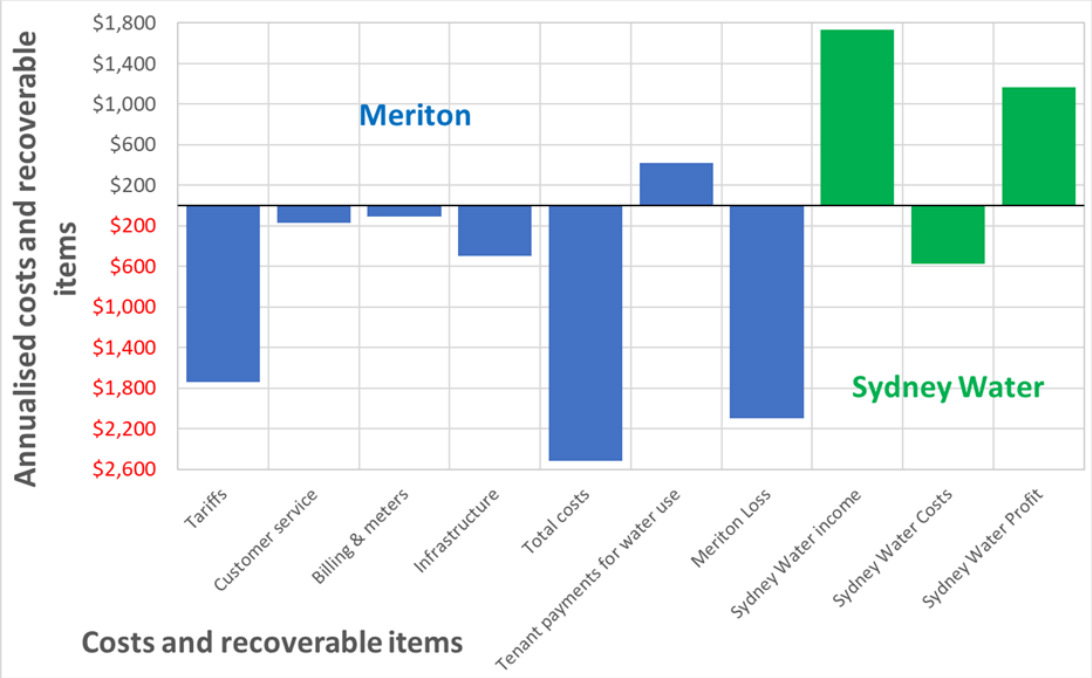
These same local services are provided by Sydney Water in land subdivisions with detached housing. However, the fixed and usage tariffs levied for each unit in multi-unit buildings, where the Building Owners provide the local infrastructure and services, are similar to the tariffs paid by the householders of detached housing. The demand profile of these units is also substantially less than detached housing.

The Australian Energy Regulator has recognised that Owners of multi-unit buildings distribute energy services to tenants of apartments within buildings. In this situation, the energy utility provides bulk services to the building and the Building Owner distributes those services to residential tenants within the building.

The Building Owner as commercial provider of residential energy services pays commercial tariffs to the energy utility at the master meter and can pass on those fixed and usage tariffs to the tenants of units with individual meters. The Residential Tenancies Act 2010 (NSW) has been amended to reflect this decision.

The Meriton Group supplies essential housing in the Build to Rent market but makes substantial losses on the provision of water, sewage and stormwater services, and pays the Water Utility for those services on behalf of tenants.

This investigation considered the costs to provide Sydney Water bulk and Meriton retail services in the Sydney Basin. The annualised value of the costs and recovery items to building owner Meriton and to Sydney Water for each unit in a multi-unit building is provided in the following Figure for 2029-30.



Annualised value of costs and recovery items of providing water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin in 2029-30

Meriton incurs annualised costs, income and loss of $2515, $418 and $2097 per residential unit for provision of water, sewage and stormwater services within multi-unit buildings. These costs do not include the additional annual costs of $955 per unit for replacement and maintenance of plumbing within residential units. The estimated annual average income, costs and profits to Sydney Water was $1736, $572 and $1164 per unit.

This inequitable pricing structure can be addressed by recognising that the Building Owner is providing retail services and distribution infrastructure within buildings, and the Water Utility is providing bulk services to buildings. This pricing structure currently applies to retail, office and commercial buildings.

In this situation, building owners are operating as commercial retailers of residential water, sewage and stormwater services that are provided, in bulk, to the property boundary by the Water Utility. It is proposed that the Building Owner can pay commercial tariffs for the water, sewage and stormwater services delivered to the property boundary by the Water Utility.

Recognising that the owner of multi-unit residential buildings as a commercial user of Sydney Water services is a more equitable pricing structure. Meriton is not asking for Sydney Water to reimburse the losses incurred in providing these retail services.

These fixed and usage tariffs should be based on readings at the master meter in accordance the published Water Utility rates for commercial services. The practice of charging fixed tariffs to the Building Owner for every unit within the building should

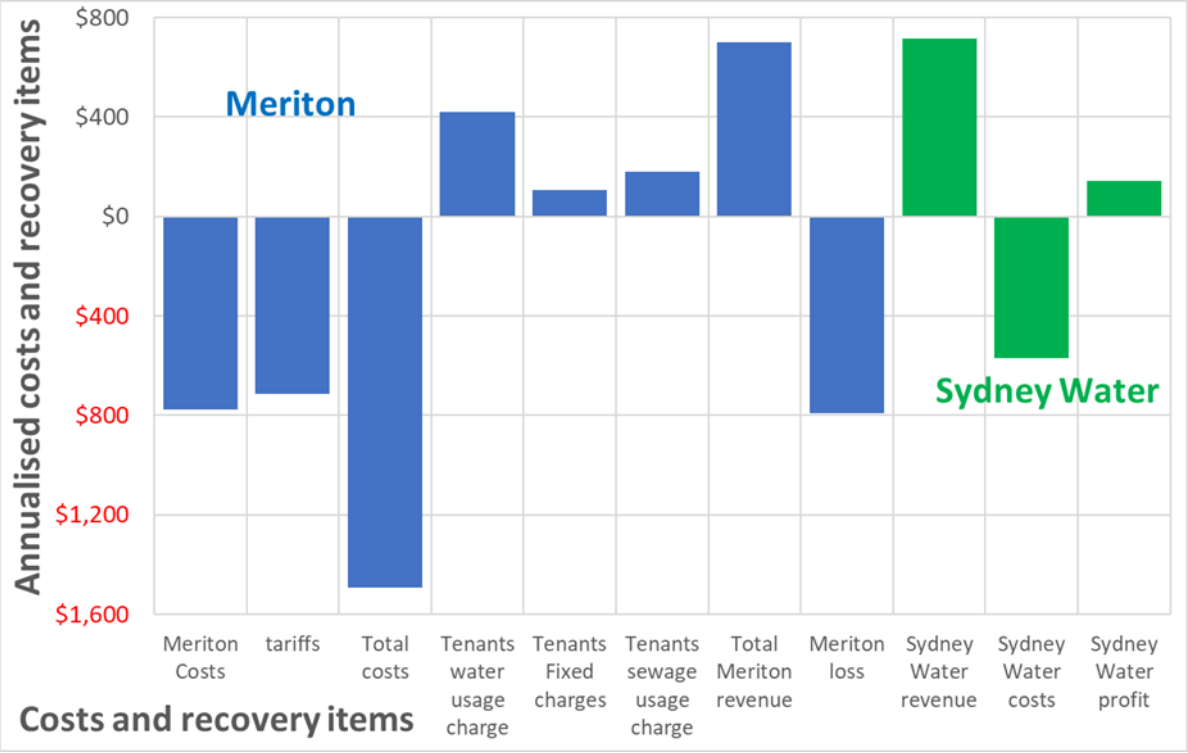
be discontinued because a significant proportion of these local services are provided by the Building Owner.

This proposed new tariff structure is consistent with the pricing structure for retail, office and commercial buildings within Sydney Water's jurisdiction, and for provision of energy utility services to tenants in multi-unit residential buildings.

It is proposed to continue with the installation of individual meters on units to facilitate sustainable water use practices and equitable billing processes for tenants. The Building Owner should continue to recover water usage tariffs from tenants based on individual meter readings.

It is also recommended that these individual meter readings can also be used to recover sewage usage tariffs from tenants at agreed rates approved by the regulator, or at commercial rates. The Building Owner as the retailer should also be permitted to charge agreed fixed tariffs for services to tenants. It is expected that these fixed tariffs will be a proportion of the commercial fixed tariffs levied by the Water Utility at the master meter.

The value of annualised costs and recovery items of the proposed changes to tariffs to the building owner Meriton and to Sydney Water for each unit in a multi-unit building in 2029-30 is provided in following Figure.



Annualised value of costs and recovery items of the proposed revised tariffs for water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin in 2029-30

The proposed new tariff structure results in average annual costs, income and losses of $1494, $701 and $793 per unit for Meriton. The estimated annual average costs,

income and profits to Sydney Water becomes $572, $715 and $144 per tenanted units in multi-residential buildings located in the Sydney Basin. The difference in the income accruing to Sydney Water is associated with the commercial fixed and usage tariffs for sewage services.

The proposed average annual tariffs to the tenants of units in multi-unit buildings is $701 in 2029-30. This is based on an equal share of the commercial fixed tariffs and the individual metered water usage with associated sewer usage tariffs. Importantly, the water and sewage usage tariffs paid by tenants will vary with measured water use at the individual water meter. This greater proportion of variable costs is expected to also foster greater water conservation.

The Greater Sydney region experiences higher utility costs in the growth corridors distant from water sources and sewage treatment infrastructure. Sydney's water saving targets and higher density development may have reduced the utility costs for inner city locations.

Inner Sydney locations, such as the Sydney Basin, with more multi-unit buildings are associated with lower average utility infrastructure costs $3216/ML than other areas with more detached housing with average costs of $4888/ML. The average utility infrastructure costs from local government areas where water demand from units is greater than 40% of total water demand is $2463/ML. In contrast the average utility infrastructure costs are $6370/ML in areas where water demand for units is less than 10% of the total water demand. These results indicate that the multi-unit buildings are associated with lower net present costs of providing utility services.

Apartments and units are an increasing proportion of the Sydney's housing stock. The lower water use in units has contributed to an 8.4% decline in total water demand for the Greater Sydney region in response to a 29.6% growth in connected water services since 2003.

Investigation of the spatial costs of providing water utility services to Greater Sydney indicate an average annual cost of $440/unit in the Sydney Basin. The average annual costs to provide water utility services to detached housing was estimated to be greater than $1058/dwelling for areas outside of the Sydney Basin. These results provide evidence that the provision of unit dwellings in the Sydney Basin provide significant reductions in the water utility costs. It is also clear that the demand profile of unit dwellings is about 30% lower than detached housing and there seems to be inconsistencies in the pricing and tariff structure leading to further inequalities for unit dwellings.

Building Owners provide water, sewage and stormwater services to residential apartments in multi-unit buildings and pay tariffs to Sydney Water on behalf of tenants. Multi-unit residential buildings provide essential housing supply and a more diverse range of affordable housing within the Sydney region that has a lower impact than

housing in greenfield areas on Sydney Water's network and security infrastructure. However, the Building Owner incurs significant losses for providing these services.

Four key changes in price regulation are proposed which improve the equity of the services provided within multi-unit buildings.

Firstly, the Building Owner should pay commercial fixed and usage tariffs at the property boundary to the Water Utility. This will reduce the losses incurred by Building Owners in providing retail services to rental apartments within buildings

Secondly, the individual meters at units can be used by Building Owners to recover tariffs for water and sewage use based on approved rates provided by the regulator. The default tariff should be the commercial rate charged to the Building Owner. In addition, the Building Owner should be able to charge regulated fixed tariffs to tenants.

Whilst these measures will not eliminate all the losses incurred by Building Owners in providing water, sewage and stormwater services, it will provide a more equitable balance in the pricing regimes and provide incentive for multi-unit residential developers to continue provide the essential housing stock in the Sydney Region. This will ultimately reduce the cost of providing expensive water infrastructure in the growth corridors for greenfield detached housing and lead to more water efficient housing to meet the targets of water conservation for Sydney.

A third measure is proposed. Application of a **full usage charge** of $6/kL for water and wastewater services (with no fixed tariffs) is proposed for all residential dwellings in Sydney for the 2025-30 regulatory period.

This initiative will foster water efficient behaviours from Sydney's households whilst providing strong opportunities for families to reduce water use to improve household welfare and environmental impacts. It is proposed that progress on water demands, wastewater discharges and Sydney Water revenue will be reviewed by Sydney Water and IPART on an annual basis. The usage charge could be reviewed each year.

In the absence of full implementation, this full usage charge could apply to multi-unit buildings providing rental accommodation. The management by Building Owners and Sydney Water can provide strong information about the performance of this simpler and more efficient pricing policy.

The fourth measure is removal of development servicing charges for proposed multi-unit buildings that provide rental accommodation. This action recognises that the Building Owner provides all the local infrastructure and water, wastewater and stormwater services within multi-unit buildings providing rental accommodation. The objective of this change is to incentivise greater supply of affordable rental accommodation.

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1 Introduction

The supply of rental apartments in multi-unit buildings is critical to support a diverse range of housing needs that are required for Sydney. However, the provision of these Build to Rent assets encounter significant financial barriers.[1] There is currently a shortage of rental apartments (vacancy rate is less than 1.6%) that is driving higher rental prices (13.8% increase since 2021 and 38% increase since 2015) which impacts on the availability of affordable housing.

In turn, citizens encounter persistent unemployment and under-employment with low real wage growth.[2] The housing industry is experiencing record low approvals and completions which increases the prices of housing and rents.[3] Ongoing wage stagnation and price inflation is adding to the lasting negative socioeconomic and economic impacts of diminished housing affordability.

The Independent Pricing and Regulatory Tribunal (IPART)[4] regulates the tariffs that Sydney Water (SWC) can levy on the properties for the provision of water, sewage and stormwater services.[5] These tariffs vary with the type of property that purchase these services. The IPART is currently reviewing the prices that Sydney Water can levy on the citizens of Greater Sydney for the 2025 to 2030 regulatory period.

Sydney Water is a State Owned Corporation that is owned by the NSW Government and is Australia's largest water utility.[6] It provides water, sewage, recycled water and some stormwater services across an area of 12,700 km^2 that includes Sydney, the Illawarra and the Blue Mountains regions. Sydney Water has submitted a proposal for revenue and price increases across the 2025-30 regulatory period to IPART.[7]

Sydney Water has requested a 103% increase in fixed tariffs and 18% higher water usages charges during the 2025-2030 regulatory period in a move away from user pays pricing.

Meriton Group is an established provider of housing in the commercial build-to-rent sector for more than two decades. Meriton own and operate more than 4,500 apartments in 15 multi-unit buildings across Sydney. As a commercial supplier of residential apartments for rent, they are charged for water, sewage and stormwater services at the same rates as individual residential apartments.

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[1] UDIA (2022), Apartment supply pipeline report, Urban Development Institute of Australia, New South Wales, November, 2022
[2] Stewart A., Stanford, J and Hardy T., (2023), The wages crisis revisited, The Australia Institute Centre for Future Work.
[3] Urban Taskforce Australia (2024), October Housing Approvals – a huge task ahead, 2 December 2024
[4] Independent Pricing and Regulatory Tribunal Act 1992 (NSW)
[5] IPART, 2020, Review of Prices for Sydney Water from 1 July 2020 - Final Report. Independent Pricing and Regulatory Tribunal New South Wales.
[6] Sydney Water Act 1994 No. 88 (NSW) as amended
[7] Sydney Water (2024), Price proposal 2025-30

As the Building Owner and landlord, they pay water, sewage and stormwater tariffs to Sydney Water on behalf of tenants. The owners and operators of the multi-unit buildings also provide services to tenants via their water and sewage networks within the buildings, and stormwater facilities within their properties.

The Building Owner can only partially recover the costs of provided services within buildings from water usage tariffs derived from individual meters at units. The Residential Tenancies Act 2010 (NSW) provides that the building owner can recover water usage tariffs from tenants, but water and sewage service tariffs are paid by the Building Owner.[8]

However, a recent determination from the Australian Energy Regulator (AER)[9] has acknowledged that Building Owners provide gas and electricity services via private infrastructure networks within buildings to residential tenants.[10] In this situation, the Building Owner is permitted to pass on utility tariffs to units with individual meters.

Meriton incurs substantial losses in provision of water, sewage and stormwater services to rental units in multi-unit buildings and is seeking a more equitable tariff structure that is consistent with the recent determination by the Australian Energy Regulator. It is expected that a more equitable tariff structure will assist to incentivise the provision of essential housing stock in Sydney.

Professor Peter Coombes from Urban Water Cycle Solutions was commissioned by Meriton Group to provide advice and assistance on reviewing Sydney Water's tariffs to support an application to IPART for a more equitable pricing structure. This report includes feasibility analysis and economic modelling of multi-unit and commercial buildings, detached housing and the provision of water utility services.

This investigation considers the billing and administration costs of providing water, sewage and stormwater services to rental units within multi-unit buildings. The impacts of the tariff structures for units and detached dwellings, and the differences between commercial and residential buildings was examined.

These considerations about the impacts of tariff structures were then contrasted with the costs of providing utility services to brownfield and greenfield areas. This investigation considered the costs to provide Sydney Water bulk and Meriton retail services in the Sydney Basin which includes but not limited to the following local government areas:

- Bayside
- Lane Cove
- North Sydney
- Northern Beaches

[8] Residential Tenancies Act 2010 (NSW), s 39(1), S 40(1)
[9] AER (2022), Final access determination, Australian Energy Regulator, June 2022
[10] NSW Fair Trading (2022), Water, electricity and gas in rental properties

- Randwick
- Canada Bay
- Parramatta
- City of Sydney
- Waverley
- Willoughby
- Ryde

The costs of providing services to residential units in Sydney Basin was compared to the estimated costs of providing services to the housing throughout the remainder of the Greater Sydney region. A more equitable tariff structure is proposed for owners of multi-unit buildings that receive bulk water, sewage and stormwater services at the property boundary and distribute those services within buildings to the tenants of units.

Two key changes in price regulation are proposed to improve the equity of the services provided within multi-unit buildings.

Firstly, the Building Owner should pay the currently defined commercial fixed and usage tariffs at the property boundary to the Water Utility. The Building Owner is providing commercial residential services, including distribution of water, sewage and stormwater services via embedded private networks.

Secondly, the individual meters at units should be used by Building Owners to recover tariffs for water and sewage use based on agreed rates. The default tariff should be the commercial rate charged to the Building Owner. In addition, the Building Owner should be able to charge regulated fixed tariffs to tenants.

This report is part of an extensive engagement with IPART and Sydney Water to resolve the inequity in pricing policy with respect to the owners of multi-unit buildings that provide retail accommodation. A timeline of the engagement is provided below.

A timeline of engagement

- 25 Nov 2022 – Letter is sent to IPART Chair to raise this issue.
- 06 Dec 2022 – Initial meeting with IPART management team.
- 01 Feb 2023 – Final report submitted to IPART Chair and Sydney Water MD.
- 21 Apr 2023 – Letter received from IPART Chair stating that they will will commence review in 2024.
- 30 May 2023 – Meeting with Sydney Water MD
- No response from Sydney Water or IPART since then.
- 09 Dec 2024 – IPART Public Submission closed for Prices for Sydney Water Corporation from 1 July 2025.

This updated report also responds to the Sydney Water Pricing Submission and the IPART Issues paper.

2 Background

Essentially the owner and operator of a multi-unit building provides services to tenants via private water and sewage networks within the buildings and pay Sydney Water for those services and for bulk services at the property boundary. The owner of new multi-unit buildings is required to install plumbing for meters to each unit, install meters at each strata title unit and may install a meter for a non-strata title unit.[11] However, Sydney Water provides individual water meters for housing in greenfield developments at their cost.

These buildings may include common area water uses and centralised hot water services which are not measured by individual meters at units but are measured at the master meter which is the responsibility of the Building Owner. In this situation, it is estimated that 40% of water use in multi-unit buildings is common area water use paid for by the building owner or the owner's corporation.[12]

The current (2024-25) and proposed (2029-30) fixed tariffs for water, wastewater and stormwater services to units and detached dwellings charged by Sydney Water are provided in Table 1.

Table 1: Current and proposed fixed tariffs for units and detached dwellings

Criteria	Fixed tariffs ($/quarter)			
	2024-25		2029-30	
	Units	Detached dwellings	Units	Detached dwellings
Water	16.76	16.76	84.59	84.59
Wastewater	137.76	137.76	231.94	231.94
Stormwater	6.81	21.8	13.02	41.73
Total	**162.33**	**176.32**	**329.55**	**358.26**

Table 1 demonstrates that units in a multi-unit building pay similar fixed tariffs to detached dwellings. A 103% increase in fixed tariffs for the 2029-30 financial year is proposed for both dwelling types. Units and detached dwellings will pay additional fixed tariffs of $167.22 and $181.94 to Sydney Water.

This investigation combined historical water use and information from the regulator IPART to define the difference between units and detached dwellings in terms of annual water use and sewage discharge factors.

Sydney Water[13] report that indoor water use is 78% of average water use in households and Australian Bureau of Statistics[14] provide that 31% of dwellings were

[11] Sydney Water (2022), Multi-level individual metering guide, Version 10: March 2022
[12] Ibid n9
[13] SWC (2021), Water conservation report 2020-21, Sydney Water Corporation, p. 32
[14] ABS (2022), Census of population and housing, Australian Bureau of Statistics

units in the Greater Sydney region in 2021. The Urban Taskforce Australia has recently employed the Australian Bureau of Statistics Building Approvals data to show that multi-unit developments were 61% - 47% of new dwelling approvals in New South Wales during the last decade (2015 – 2024).[15] It is expected that the proportion of units in the dwelling mix for Greater Sydney has increased since 2021.

A historical summary of metered water uses in each local government area for different customer types[16] and regional water use[17] was combined with population and dwelling projections[18] to estimate the annual water for units and detached dwellings as shown in Table 2.

Table 2: Average annual water uses for houses and units

Year	Average water use (kL/yr)			Proportion of Units (%)	Average Costs ($/connection)
	Residential	Houses	Units		
2010	205	222	157	25.2	2092
2011	197	214	152	25.8	1504
2016	201	218	155	28.1	1301
2021	186	202	143	30.7	1313
2023	176	195	134	31	1575

Table 2 shows that average annual residential water use has declined, and the proportion of units has increased since 2010. During that period, Sydney Water also experienced a decline in the combined operating and capital costs of providing water and sewage services (average costs). These combined costs have increased since 2021. The demand profile of unit dwellings is about 30% lower than detached housing and there seems to be inconsistencies in the pricing and tariff structure leading to further inequalities for unit dwellings.

This information was employed to derive the current annual average water use and sewage discharge factors of units and detached dwellings as shown in Table 3.

Table 3: Water use and sewage discharge factors

Criteria	Units	Detached dwellings
Water use (kL/year)	134	195
Sewage discharge factor (%)	94	78

Table 3 reveals that units have a lower annual water use and higher sewage discharge factor that detached dwellings. This information was utilised in the analysis of the impact of tariffs.

[15] Urban Taskforce Australia (2024), October Housing Approvals – a huge task ahead. 2 December 2024.
[16] Coombes P. J., (2022), A systems perspective on characterising resilience in urban water markets, OzWater 22 conference, Australian Water Association, Brisbane.
[17] BOM, (2024), Urban NPR 2022-23: complete dataset, Bureau of Meteorology
[18] ABS (2022), Census of population and housing 2021, Australian Bureau of Statistics

Sydney Water provide that the daily water use of high-rise units is 3.34 L/m^2 of floor area.[19] Application of the Sydney Water rate to the average dwelling area of 80 m^2 of Meriton rental apartments results in an average annual water use of 98 kL/annum. The typical dwelling size and estimated average annual water use in Meriton rental apartments is provided in Table 4.

Table 4: Attributes and estimated water use from Meriton multi-unit buildings providing rental accommodation

Dwelling size	Floor area (m^2)	Water use (kL/yr)
One bedroom	55 - 60	67 - 73
Two bedrooms	77 - 85	94 - 104
Three bedrooms	95 - 105	116 - 128

Table 4 demonstrates that the average annual water use of Meriton rental apartments ranges from 67 kL to 128 kL which is a lower annual water use than average all units presented in Table 2. This result may represent that dwellings in multi-unit buildings have lower water use and wastewater discharges than all unit dwellings. These average calculations are consistent with the 50% value (around 100 kL) of the cumulative frequencies of water use in units presented in the Sydney Water Pricing Submission.[20]

The Residential Tenancies Act 2010 (NSW) currently provides that the tenant must pay water usage charges of residential premises that are separately metered, include water efficiency measures and do not exceed the amount payable by the landlord.[21] The landlord (Building Owner) is responsible for all charges (except water use) in connection with water supply and for the supply of sewage services.[22]

It is noteworthy that the Act does not directly refer to rental apartments or units in multi-unit buildings. Following the recent determination by the Australian Energy Regulator[23], the Residential Tenancies Act requires that tenants pay all charges for electricity, gas or oil services provided an individual meter is installed at the unit.[24]

The Australian Energy Regulator recognises that Building Owners provide services to residential units via the private or "embedded" infrastructure networks within buildings and the Building Owner is a provider of commercial residential services.

Residential tenants (end users) of services in multi-unit buildings are responsible for paying fixed and usage tariffs for utility services as shown in Table 5.

Table 5 highlights that Building Owners can recover usage and fixed tariffs from

[19] Sydney Water. Average daily water use by property development type, accessed 2/12/2024
[20] Sydney Water (2024), Price proposal 2025-30, Figure 12.3, p. 544.
[21] Ibid, n4, s 39(1) (a), (b), (c)
[22] Ibid, n4, s 40(1) (e), (g)
[23] Ibid, n5
[24] Ibid, n4, s 38(1) (a)

tenants of residential units for gas and electricity services, and only usage tariffs for water services.

Table 5: Payment responsibility of residential tenants in multi-unit buildings: gas, electricity and water

Category	Usage tariffs	Fixed tariffs
Gas	√	√
Electricity	√	√
Water	√	X
Sewage	X	X

The Building Owner cannot recover the fixed charges for water and sewage services from tenants. In addition, the Building Owner is charged the accumulative fixed tariffs for all residential units rather than a service charge at the master meter at the property boundary of the building.

In contrast, the owners of commercial buildings pay fixed and usage tariffs at the master meter at commercial rates for services provided by Sydney Water to the property boundary. An example of the current and proposed rates for commercial services to multi-unit non-residential buildings are provided in Table 6.

Table 6: An example of commercial tariffs levied by Sydney Water

Criteria	Tariffs	
	2024-25	2029-30
Water 100 mm meter ($/quarter)	418.98	2114.81
Sewage 100 mm meter ($/quarter)	3443.99	5798.39
Stormwater ($/10,000 to 45,000 m^2 property/quarter)	565.68	1080.73
Water usage ($/kL)	2.67	3.12
Sewage usage ($/kL)	1.36	1.41

Table 6 provides the water and sewage tariffs that are applied to a 100 mm diameter master water meter in a commercial setting. Note that the commercial rates also include a sewage usage tariff that is based on the metered water use and an assumed sewage discharge factor.

These results show a 103% ($4565/quarter) increase in the proposed fixed tariffs to 2029-30 with higher water and sewage usage charges of 17% and 4%. The proposed Sydney Water pricing strategy is dominated by a doubling of fixed tariffs that limit opportunity of the customer to manage water bills and improve environmental impacts by reducing water use.

Importantly, the commercial tariffs provide a sewage usage charge which better recognises that water use and sewage discharges are directly linked in dwellings within muti-unit dwellings. The absence of a sewage usage tariff and the high residential fixed charge of $927.74/annum ($231.94/quarter) does not provide for variations

water and associated sewage demands. These dominant fixed changes remove incentives to manage water demands and linked sewage discharges from buildings.

3 Private Infrastructure Networks, Billing and Administration

The owners and operators of the multi-unit buildings provide services to tenants via private water and sewage networks within the buildings as shown in Figure 1. A Building Owner provides all the local water and sewage services to the property boundary of units within the building. Sydney Water provide water and sewage services to the property boundary of the multi-unit building.

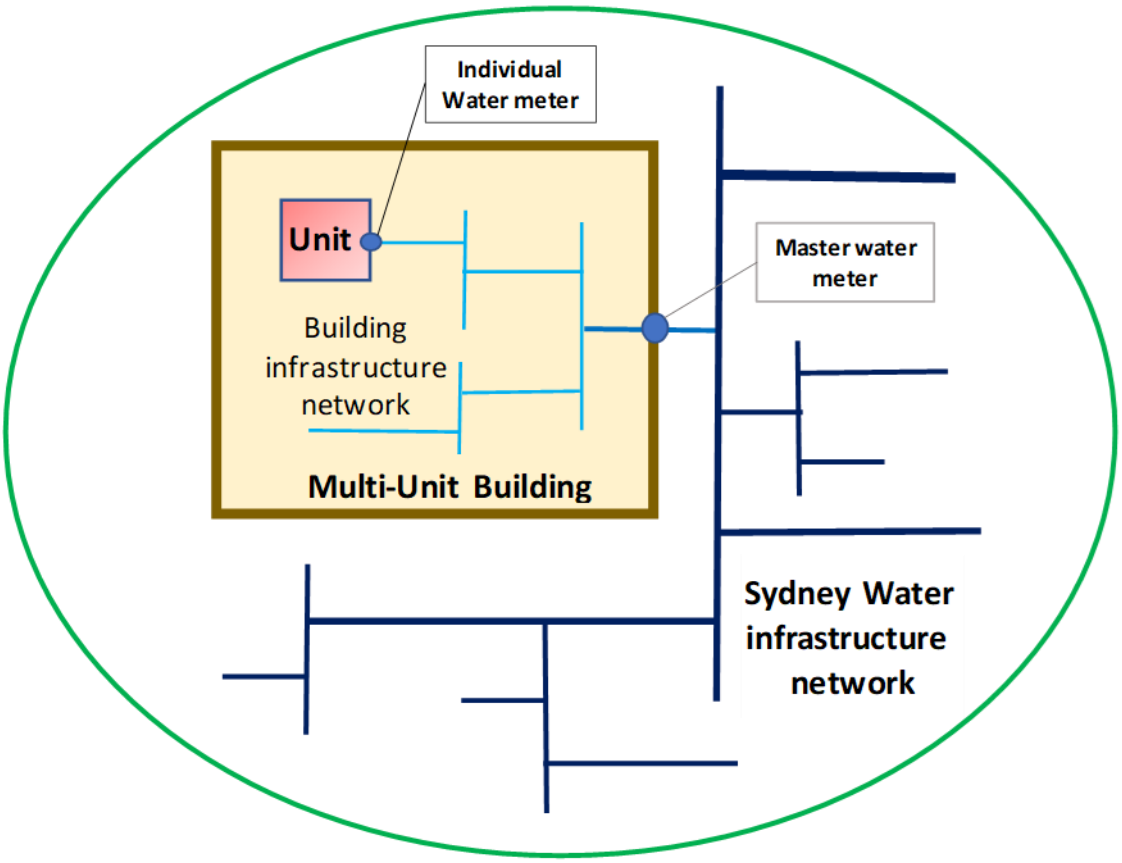

Figure 1: The private building and Sydney Water infrastructure networks

Figure 1 shows that the Sydney Water network provide services to the building and then the Building Owner distributes those services via the building infrastructure network to units.

In the case of bulk water supply, the Sydney Water service is to the master meter at the property boundary and the Building Owner's private local network and distribution service is from the master meter to the individual meter at each unit. The Building Owner purchases and installs the individual meters which are gifted to Sydney Water.

Sewage discharges from each unit is also collected in a building infrastructure network and discharged to the Sydney Water sewage network at the property boundary of the multi-unit building. The building also discharges stormwater to the infrastructure network owned by the local council and Sydney Water.

These private network services include provision, operation, maintenance and replacement of distribution infrastructure within buildings. This investigation does not consider the infrastructure within each unit as part of the private infrastructure networks within buildings.

The Building Owner provides for the commercial risk and depreciation of the distribution infrastructure within buildings. Each unit is also provided with individual water meters and associated plumbing. All local administration of accounts, inquiries, requests for assistance and complaints by tenants are also provided by the Building Owner.

The annual costs for Meriton to provide billing and administration services to over 4500 rental units were examined to understand the value of these building infrastructure services. These services were categorised as accounts payable, property management, building management, executive management and information technology support. These cost categories are outlined below:

Accounts Payable

The Accounts Payable processes include receiving invoices from Sydney Water, and then verification and processing of the invoices. These activities involve resolving the range of issues that are associated with invoices, such as incorrect amounts, readings and addresses.

Property Management

The Property Management category includes invoicing to tenants for usage only and answering the tenants' enquiries about water bills. These processes include allocation of payments received, account for trading risk (bad debts), inquiries about overdue accounts and Building Owner management of water bill enquiries.

Building Management

The Building Management tasks include responding to complaints and inquiries about services from tenants. This category includes the organisation and delivery of routine maintenance, repairs and replacement of water, sewage and stormwater infrastructure.

Executive Management

The Executive Management tasks in verification, resolution and approval of actions to ensure the efficient operation of the administration, operation and billing for water, sewage and stormwater services.

Information Technology (IT) Support

Information Technology Support includes the development, provision and operation of software to support administration, billing, operations and maintenance.

A summary of these billing and administration costs is presented in Table 7.

Table 7: Billing and administration costs for multi-unit buildings

Description	Time (hours/year)	Annual cost ($)	Cost/unit ($)
Accounts Payable	1560	101,400	21.94
Property Management	6240	405,600	87.77
Building Management	5200	338,000	73.14
Executive Management	312	121,680	26.33
IT support	1560	202,800	43.89
Total	**14,872**	**1,169,480**	**253.08**

Table 7 shows that the annual billing and administration costs incurred by Meriton equate to $253 per unit. The costs providing water, sewage and stormwater infrastructure within three recently constructed multi-unit buildings at Zetland, Macquarie Park and East Gardens are provided in Table 8.

Table 8: Costs to provide water, sewage and stormwater networks within multi-unit buildings

Item	Building A	Building B	Building C
Stormwater and sewer design	$89,836	$214,370	$382,961
Water design	$137,395	$47,792	$1,481
Construction	$5,184,750	$5,040,126	$7,334,793
Total	$5,411,980	$5,302,288	$7,719,234
Units	279	223	394
Cost per unit	**$19,398**	**$23,777**	**$19,592**

Table 8 reveals that the costs of providing water, sewage and stormwater infrastructure in multi-unit buildings range from $19,398 to $23,777 per unit. These costs to provide water, sewage and stormwater services within buildings are consistent with the $19,406/unit estimated by Urbis (2021).[25] An average value of $20,922/unit was used with a depreciation rate of 2% to determine the annual depreciation costs of the building infrastructure network.

The Building Owner also purchases and installs individual water meters at the costs provided in Table 9.

The cost to purchase and install individual water meters of $630 per unit was adopted for this investigation.

[25] Urbis (2021), Supplemental economic benefits, Little Bay NSW, Table 2, p. 3

Table 9: Costs to purchase and install individual water meters

Item	Costs ($)	
	Itron	Diehl Enware
Meter	365	430
Labour	200	200
Total	**565**	**630**

The current and proposed Sydney Water charges to the Building Owner for the water, sewage and stormwater tariffs for each residential unit are shown in Table 10. The average annual water use of the unit was estimated at 134 kL from monitoring of the 4500 Meriton units and the BOM NPR.

Table 10: The current (2024-25) and proposed (2029-30) water, sewage and stormwater tariffs paid to Sydney Water for a unit in a residential multi-unit building

Tariff	2024-25		2029-30	
	Rate	Annual cost ($)	Rate	Annual cost ($)
Water service	$16.76/quarter	67.04	$84.59/quarter	338.37
Water usage	$2.67/kL	357.78	$3.12/kL	418.08
Sewer service	$137.76/quarter	551.04	$231.94/quarter	926.74
Stormwater service	$6.81/quarter	27.22	$13.02/quarter	41.73
Total		**1003.08**		**1724.92**

The average annual costs of providing, maintaining and replacing plumbing infrastructure inside residential units of $955 per unit was also derived from Meriton's records as provided in Table 11. These costs were not included in this analysis of providing services to units for equivalence with the distribution of services within land subdivisions to property boundaries of detached housing.

Table 11: Maintenance and replacement of plumbing in units

Item	Average costs ($/unit/year)
Servicing and maintenance	38
Repairs and fittings	173
Replacement	209
Labour	535
Total	**955**

The billing and administration (Table 7), depreciation of building network infrastructure, purchase and installation of individual water meters (Table 9) and the average annual tariffs (Table 10) were combined to understand the annual average costs incurred by the Building Owner.

It was also assumed that the multi-unit building did not include centralised hot water services, and the Building Owner was able to pass on the water usage tariff ($357.78) to the tenant. The annualised costs and recoverable items of the providing water, sewage and stormwater services were evaluated using a 30 year horizon and 4% real interest rate for the current (2024-25) scenario as presented in Figure 2.

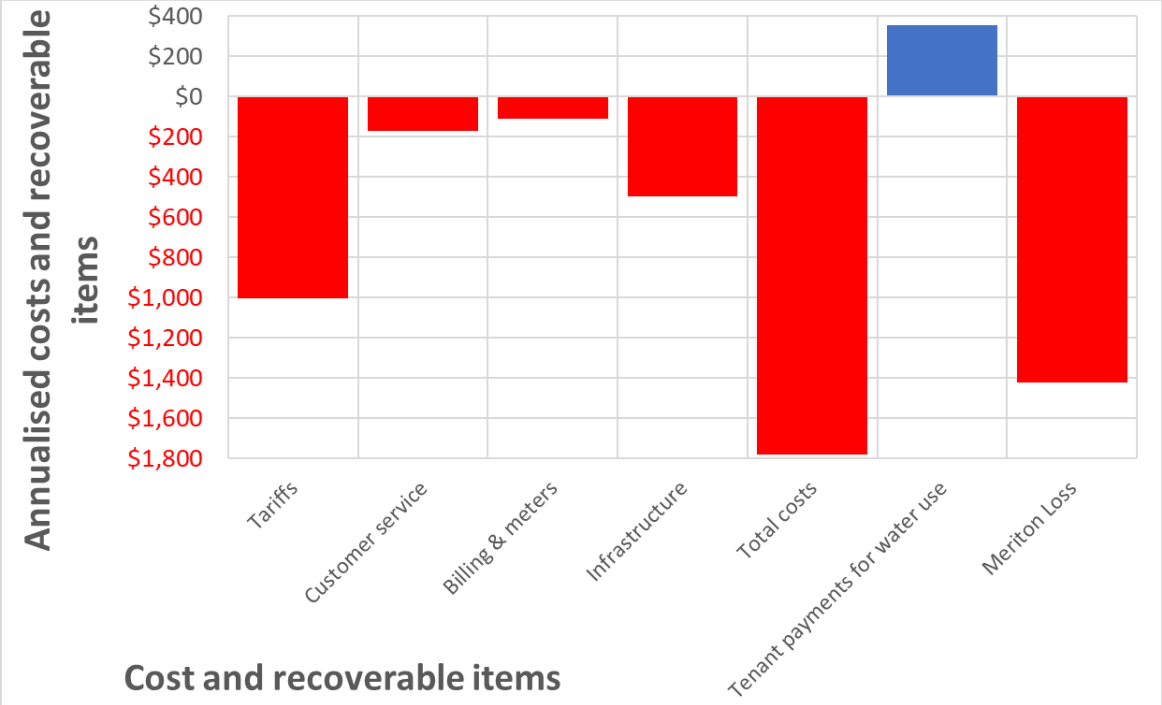

Figure 2: Annualised costs and recoverable items of providing water, sewage and stormwater services to a unit in a multi-unit residential building in the current (2024-25) scenario.

Figure 2 reveals that Meriton's average annual costs to deliver water, sewage and stormwater services are $1782 per unit. They receive income of $358 per unit for water use tariffs based on the individual meter. The Building Owner incurs a loss of $1424 per unit in providing water, sewage and stormwater services to residential units.

The annualised costs and recoverable items of the providing water, sewage and stormwater services were evaluated using a 30 year horizon and 4% real interest rate for the proposed (2029-30) scenario as presented in Figure 3.

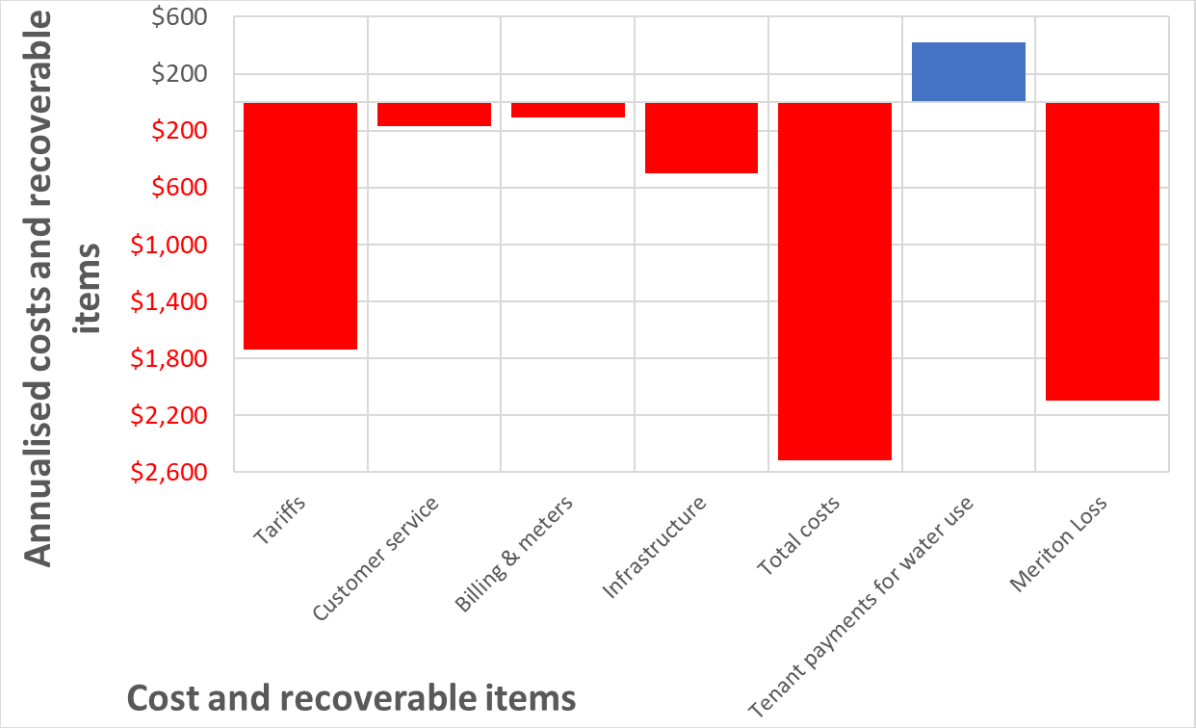

Figure 3: Annualised costs and recoverable items of providing water, sewage and stormwater services to a unit in a multi-unit residential building in the proposed (2029-30) scenario

Figure 3 reveals that Meriton's average annual costs to deliver water, sewage and stormwater services increase to $2515 per unit. They receive income of $418 per unit for water use tariffs based on the individual meter. The losses incurred by the Building Owner increase to $2097 per unit in providing water, sewage and stormwater services to residential units.

The structure of the proposed price rises by Sydney Water increases the losses incurred by the Building Owner by 47% or $673 per unit.

4 Commercial and Residential Buildings

Consider that the Building Owner is a commercial provider of long terms rental units in Sydney. The Building Owner also receives bulk water, sewage and stormwater services from the Water Utility at the property boundary through the master meter and distribute these services to tenants within multi-unit buildings.

The Water Utility provides bulk services to the building and the Building Owner provides distribution and retail services within the building and property. In this situation, the current and proposed commercial tariffs for water, sewage and stormwater services (Tables 6 and 10) could apply at the master meter of the multi-unit building.

The Building Owner currently pays the fixed water and sewage tariffs for each residential unit in the multi-unit building. In addition to these cumulative fixed tariffs, the Building Owner also pays the usage charges for each unit.

The differences between the current residential tariff arrangements (Table 6) and the commercial tariffs (Table 10) were considered for several Meriton multi-unit buildings as shown in Table 12. The measurements of water use in Meriton multi-unit buildings with full occupancy are provided in Table 13 to show the variation in annual water use.

Table 12: Attributes of selected Meriton multi-unit residential buildings with rental apartments

Location	Units	Average Use (kL/yr)
Building D: North Sydney	79	146
Building E: East Gardens	177	69
Building F: Mascot	243	164

Table 13: Variation in average annual water use in selected Meriton multi-unit residential buildings

Location	Units	Average Use (kL/yr)		
		2022	2023	2024
Building G: East Gardens	204	61	62	58
Building H: Rosebery	229	128	130	117
Building F: Mascot	243	164	173	151

An important difference between the pricing regimes is that commercial tariffs include fixed and usage charges for sewage services that are based on metered water use. In contrast, the residential pricing regime only includes a fixed charge for sewage services.

Tables 12 and 13 also demonstrates the variability in average water demands for rental units which also highlights the variability of the sewage discharges from the buildings.

These results are evidence that fixed and usage charges for sewage services is also a more equitable and sustainable pricing strategy.

The tariffs paid by the Building Owner for the current (2024-25) residential pricing for each unit versus the commercial tariffs at the master meter are provided in Table 14 for several residential buildings.

Table 14: Comparison of current (2024-25) residential pricing arrangements versus commercial tariffs for water, sewage and stormwater services at selected residential buildings

Location and scenario	Annual tariffs ($)				
	Water	Sewage	Stormwater	Total	Total/unit
Building D: North Sydney					
Residential	36,121	43,532	2152	81,805	1036
Commercial	32,501	28,535	2259	63,295	801
Building E: Eastgardens					
Residential	44,592	97,534	4821	146,948	830
Commercial	34,402	29,445	2259	66,106	373
Building F: Mascot					
Residential	122,760	133,903	6619	263,282	1083
Commercial	108,145	64,753	2259	175,157	721

Table 14 demonstrates that the total commercial tariffs paid by the Building Owner are substantially less than the current residential tariffs arrangements. These differences range from $234/unit (22.6%) to $457/unit (55%).

A significant proportion of the differences between the current residential and commercial costs are attributed to the sewage pricing regime. A smaller fixed tariff and inclusion of a usage charge ($1.36/kL) will combine with water usage tariffs ($2.67/kL) to incentivise water efficiency.

These differences in tariffs will assist with the substantial losses the Building Owner incurs for providing the infrastructure and administration network within the building, and for taking the commercial risk of providing these retail services.

The proposed (2029-30) residential pricing for each unit versus the commercial tariffs at the master meter are provided in Table 15.

Table 15 reveals that the proposed increases in Sydney Water tariffs for 2029-30 will increase the costs to the Building Owner by $485/unit - $606/unit. These 69% - 85% increases in costs equate to additional costs to provide rental units of $2.11 m – 2.64 m per annum based on Meriton's current rental assets.

Table 15: Comparison of proposed (2029-30) residential pricing arrangements versus commercial tariffs for water, sewage and stormwater services at selected residential buildings

Location and scenario	Annual tariffs ($)				
	Water	Sewage	Stormwater	Total	Total/unit
Building D: North Sydney					
Residential	62,751	73,293	4114	140,158	1774
Commercial	44,480	34,495	4323	83,298	1054
Building E: Eastgardens					
Residential	98,132	164,214	9218	271,563	1534
Commercial	46,701	35,439	4323	86,463	488
Building F: Mascot					
Residential	206,635	225,446	12,655	444,736	1830
Commercial	132,872	72,045	4323	209,240	861

Table 15 also shows that the total commercial tariffs paid by the Building Owner are substantially less than the proposed residential tariffs arrangements for 2029-30. These differences range from $719.75/unit (41%) to $1045.76/unit (68%). The proposed Sydney Water tariffs result in a substantial wealth transfer from Building Owners to Sydney Water.

It is reasonable to levy commercial tariffs to the owners of multi-unit dwellings because they are providing water, sewage and stormwater services to the tenants of the units. This proposed change of the tariff structures around a model of Building Retailer and Water Utility Bulk Provider is similar to the current arrangements for commercial, office and retail buildings in Sydney Water's jurisdiction, and for the provision of other essential services such as gas and electricity services in Sydney.

The Australian Energy Regulator has facilitated the same Bulk Provider and Building Retailer arrangements for rental apartments in multi-unit buildings in the electricity and gas markets. Gas and electricity suppliers rely on a similar cost structure to water and sewage services where the customer pays fixed and usage tariffs. The Building Owner pays commercial rates at the bulk meter for gas and electricity that are distributed to tenants.

Meriton purchases bulk gas and electricity supplies at commercial rates from energy retailers. These commercial rates are more competitive than the charges associated with individual residential meters. The relevant energy distributors for gas and electricity in NSW, Jemena, Ausgrid and Endeavour Energy, also charge commercial fixed tariffs for network and distributions services at the building master meter. This is a more equitable tariff for multi-unit residential buildings.

An example of the previous and current mode of fixed tariffs that are charged by gas and energy distributors to multi-unit residential buildings is provided in Table 16.

Table 16: Example of fixed tariffs for bulk gas and electricity services to multi-unit residential buildings

Building	Meter	Number of units	Number of meters	Annual fixed tariffs
Fixed tariffs - gas				
D – City of Sydney	Individual	162	162	$38,910
A – North Sydney	Bulk master	218	1	$285
Fixed tariffs - electricity				
D – City of Sydney	Individual	162	162	$58,915
A – North Sydney	Bulk master	218	1	$407

The Australian Energy Regulator[26], NSW Fair Trading[27], and the Residential Tenancies Act 2010 (NSW)[28] recognises that Building Owners provide services to residential units via the private infrastructure networks within buildings and the Building Owner is a provider of commercial residential services.

These changes in pricing regimes to recognise that Building Owners are distributing services to tenants of multi-unit buildings supports the provision of these retail services.

There is also a need to consider improvements in the tariff structures for water, sewage and stormwater services that consider the location and category of housing that requires these services.

The impact of applying the current (2024-25) commercial tariffs to multi-unit residential building that includes 300 rental apartments is presented in Figure 4. In this example, the Building Owner also passes on the fixed and usage charges for commercial water and sewage services to the tenants. The water use attributes from Table 4 (water use: 134 kL/unit; sewage discharge factor: 0.94) and the commercial tariffs from Table 6 were applied to this example.

Figure 4 shows that the annual fixed tariffs are $51.44/unit, sewage usage tariffs are $165/unit and water usage tariffs are $357.78/unit. The total annual tariffs payable to Sydney Water are $581.76/unit and the Meriton loss is reduced to $786.15/unit.

[26] Ibid n5
[27] Ibid n6
[28] Ibid n17

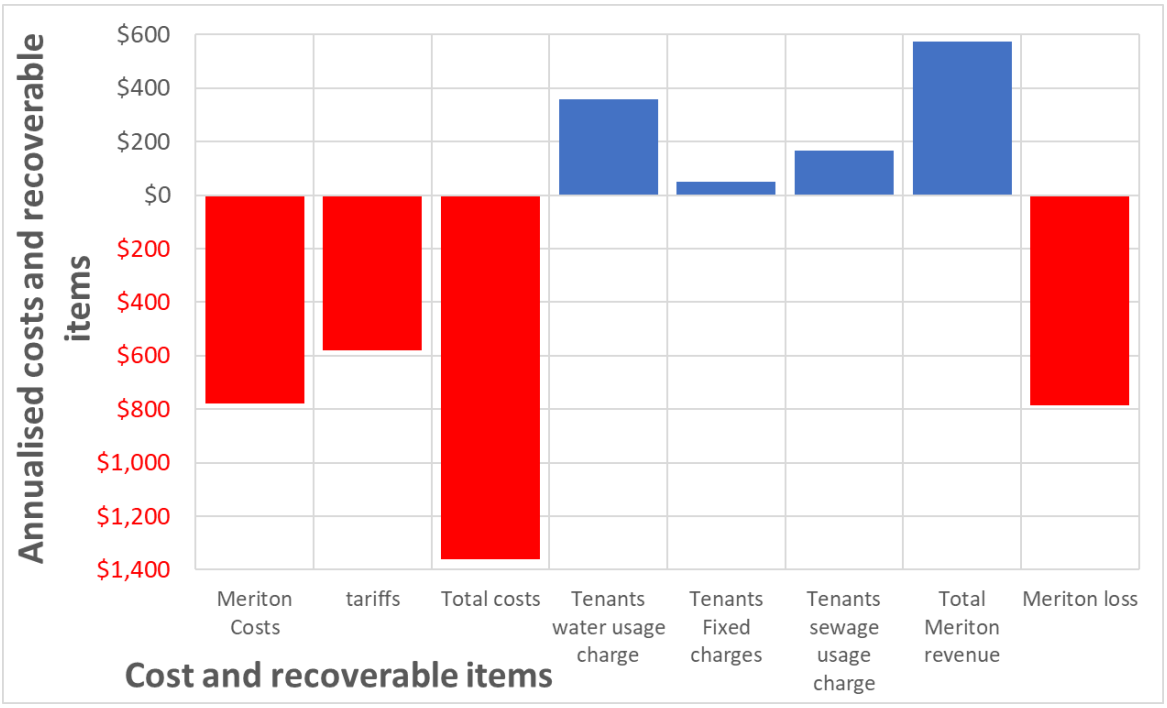

Figure 4: Impact of current (2024-25) commercial tariffs on annualised costs and recoverable items of providing water, sewage and stormwater services to a unit in a multi-unit residential building

The impact of applying the proposed (2029-30) commercial tariffs to multi-unit residential building that includes 300 rental apartments is presented in Figure 5.

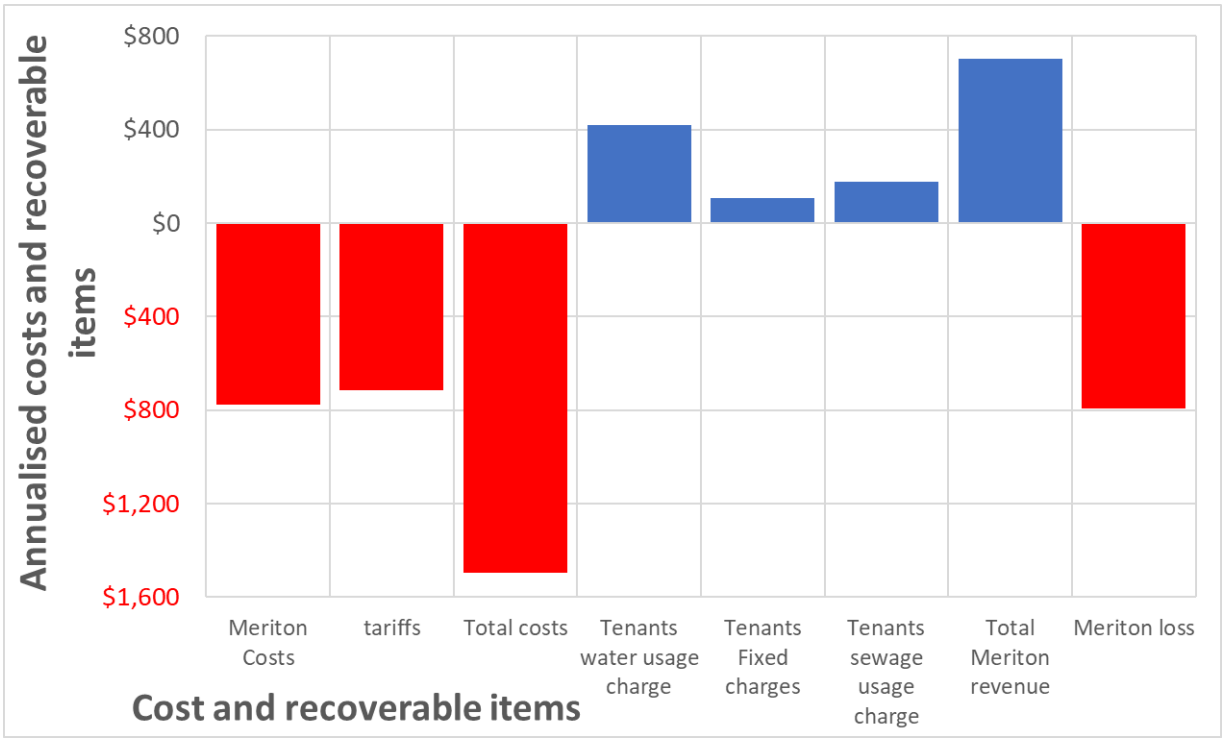

Figure 5: Impact of proposed (2029-30) commercial tariffs on annualised costs and recoverable items of providing water, sewage and stormwater services to a unit in a multi-unit residential building

Figure 5 reveals that the annual fixed tariffs are $105.51/unit, sewage usage tariffs are $177.6/unit and water usage tariffs are $418.08/unit. The total annual tariffs

payable to Sydney Water are $715.60/unit and the increases in Meriton losses is reduced at $793.03/unit.

Use of the proposed commercial tariff regime for the build to rent properties mitigates the substantial growth in losses (60% - 85%) that the Building Owners will incur under Sydney Water's proposed residential pricing regime. The impacts of the proposed commercial pricing regime on the key entities are summarised in Table 17.

Table 17: Summary of impacts of the proposed application commercial tariffs to multi-unit buildings providing rental accommodation

Entity	Billing period	
	2024-25	2029-30
Tenants annual bill	574.22	701.19
Sydney Water revenue	581.76	751.60
Meriton loss	786.15	793.02

Table 17 shows similar moderate increases the annual water bill to tenants and in Sydney Water revenue with a small increase the losses incurred by Meriton. This option presents an acceptable compromise in the pricing strategy.

5 Greenfield and Brownfield Costs

The costs of housing in greenfield and brownfield areas of Greater Sydney are considered in this section to estimate the relative costs of servicing residential units in brownfield areas. The current (2024-25) water, sewage and stormwater tariffs (Table 1) were combined with average water and sewage volumes of residential units and detached dwellings (Table 3) to compare the annual average tariffs in Table 18.

Table 18: Comparison of the current (2024-25) annual average tariffs for units and detached dwellings

Tariff	Units		Detached dwellings	
	Rate	Annual cost ($)	Rate	Annual cost ($)
Water service	$16.76/quarter	67.04	$16.76/quarter	67.04
Water usage	$2.67/kL	357.78	$2.67/kL	520.65
Sewer service	$137.76/quarter	551.04	$137.76/quarter	551.04
Stormwater service	$6.81/quarter	27.22	$21.80/quarter	83.12
Total		**1003.08**		**1221.85**

Table 18 shows that the annual average tariffs for Sydney Water services is greater for detached dwellings ($1221.85) than units ($1003.08) under the current pricing regime. Sydney Water earns higher revenue from detached dwellings as compared to units. These differences in revenue are driven by water use and stormwater tariffs. The impact of the proposed (2029-30) water, sewage and stormwater tariffs are presented in Table 19.

Table 19: Comparison of the current (2029-30) annual average tariffs for units and detached dwellings

Tariff	Units		Detached dwellings	
	Rate	Annual cost ($)	Rate	Annual cost ($)
Water service	$84.59/quarter	338.37	$84.59/quarter	338.37
Water usage	$3.12/kL	418.08	$3.12/kL	608.40
Sewer service	$231.94/quarter	927.74	$231.94/quarter	927.74
Stormwater service	$13.02/quarter	52.09	$41.73/quarter	166.91
Total		**1736.28**		**2041.42**

Table 19 shows that the annual average tariffs for Sydney Water services for detached dwellings ($2041.42) and units ($1736.28) have increased at a similar rate.

5.1 Regional systems analysis

This report utilises the detailed Systems Framework analysis of the Greater Sydney region by author and colleagues to understand the spatial costs of providing regional

utility services. Outputs from this analysis were employed to estimate the relative costs of providing water and sewage services to residential units.

The Systems Framework approach is anchored on detailed big data inputs, such as demography, socioeconomics, topography and climate, and linked systems that account for water demands, water supply, sewerage flows, stormwater runoff and economic considerations.

The reports that underpin this investigation of spatial utility costs include peer reviewed publications, industry and government reports, such as:

- Coombes P.J., (2024), The influence of regulation on preference for utility infrastructure investment to generate income for Australian water corporations, Australasian Journal of Water Resources, 28(2), 151-172.
- Barry, M.E., and Coombes, P.J., (2018), Planning resilient water resources and communities: the need for a bottom-up systems approach, Australasian Journal of Water Resources, 22(2), 113-136.
- Coombes, P. J., (2022), A systems perspective on characterising resilience in urban water markets, OzWater 2022, Australian Water Association, Brisbane, Australia.
- Coombes P. J., Barry, M. E., Smit, M., (2019), Bottom up systems analysis of market mechanisms for pricing water and sewage services. OzWater19, Australian Water Association, Melbourne.
- Coombes, P. J., (2022), Modelling the impact of changes to BASIX, Report to the Department of Planning, Industry and Environment
- Coombes P.J and M.E. Barry., (2015), A systems framework of big data for analysis of policy and strategy, 9th International Water Sensitive Urban Design (WSUD 2015), Engineers Australia, Sydney, Australia
- Bonacci Water and Coombes P. J., (2010), Sydney Water Alternative Water Strategy – A vision of what is possible and a road map to get there, Report to the board of Sydney Water Corporation.

The systems analysis incorporated the population of the Greater Sydney region that is expected to increase from 5.3 million in 2020 to more than 8 million in 2050 (DPIE, 2020).[29] The region includes twelve different water utility demand zones that are supplied from the Warragamba, Upper Nepean, Shoalhaven and Woronora river catchments.

Water demands for the local government areas in the Greater Sydney region and data from the nearest weather stations were combined in the regional analysis. Observations of daily water demand from 1976 to 2020 for the water supply

[29] DPIE, 2020, Greater Sydney and regional NSW projections, Department of Planning, Industry and Environment.

catchments and local government areas were included in this investigation. This data sourced from Sydney Water, the NSW Government and the Bureau of Meteorology (BOM, 2013 – 2024)[30] enabled development of local behavioural water demands and verification of these water demands at different scales (Barry and Coombes, 2018).[31]

Streamflow from the Warragamba catchment is captured at Warragamba Reservoir. Water from the Cataract, Cordeaux, Avon and Nepean Dams located in the Upper Nepean catchment is conveyed via a system of pipes, natural river channels, weirs, tunnels and aqueducts to Prospect Reservoir whilst also supplying various communities along the transfer routes. The South Coast region is supplied with water from the Avon and Cordeaux Dams and Nepean Dam via the Nepean–Avon tunnel.

Streamflow from the Shoalhaven catchment is captured in Lake Yarrunga and Tallowa Dam where water is pumped to Wingecarribee Reservoir via Fitzroy Falls Reservoir when the water storage volume in Warragamba Dam is less than 65%. Water from the Wingecarribee Reservoir is distributed to Nepean Dam and Lake Burragorang via the Wingecarribee and Wollondilly Rivers. The townships of Mittagong and Bowral are also supplied with water from the Wingecarribee Reservoir. Desalination is used to supplement the water supply from the Potts Hill reservoir when total storages in dams are less than 80%.

Water restrictions were assumed to commence when total dam storages are drawn down to less than 60%. The timing of water security augmentation was estimated to be triggered by a probability of water restrictions that is greater than 10% or a 1% risk of total dam storage less than 10% in any year.

The analysis includes four potential water security augmentation options and augmentation of local water and sewage treatment plants that was triggered by simulated exceedances of published capacity. Upgrades, maintenance and renewal of transfer infrastructure is dependent on current capacity and changes in flowrates with costs at historical rates (see IPART, 2020).[32]

5.2 Spatial costs

Coase (1947) established that marginal costs of water supply were dependent on the magnitude of water demands and distances from the water sources for each consumer.[33] Clarke and Stevie (1981) analysed the costs of sourcing, treating and distributing water, and found that marginal costs of water supply increases with the

[30] BOM, (2014 - 2024), Urban National Performance Reports, Bureau of Meteorology. Commonwealth Government of Australia.
[31] Barry, M.E., & Coombes, P.J., 2018, Planning resilient water resources and communities: the need for a bottom-up systems approach, Australasian Journal of Water Resources, 22(2), 113-136.
[32] IPART, 2020, Review of Prices for Sydney Water from 1 July 2020 - Final Report. Independent Pricing and Regulatory Tribunal New South Wales.
[33] Coase, R.H., 1947, 'The economics of uniform pricing systems', Manchester School of Economics and Social Studies, 139-156.

magnitude of demand, population density and transfer distances.[34] Spatial costs were also dependent on the need for water quality treatment that service each location within the system.

The spatial variation of the costs of utility water supply were estimated as a function of demand, population density, the distance and sum of increased elevation in the route of trunk infrastructure from nearest water sources to the centroid of each local government area.[35] This relationship was also employed to estimate the spatial costs of sewage services as function of the distance and sum of increased elevation in the route of trunk sewage infrastructure from the centroid of each local government area to sewage treatment plants. The costs of water and wastewater treatment in each catchment was also included in the analysis.

These spatial costs were determined using the Systems Framework and the classic economic perspective that in the long run all costs are variable and must be counted in economic analysis (Coase, 1947). The spatial costs of utility water and sewage services from 2010 to 2050 were derived as annualised total costs (real interest rate of 4%) in 2022 dollars divided by total water demand.[36] These annualised spatial costs are compared to the proportion of water demands from unit and apartment dwellings in Figure 6.

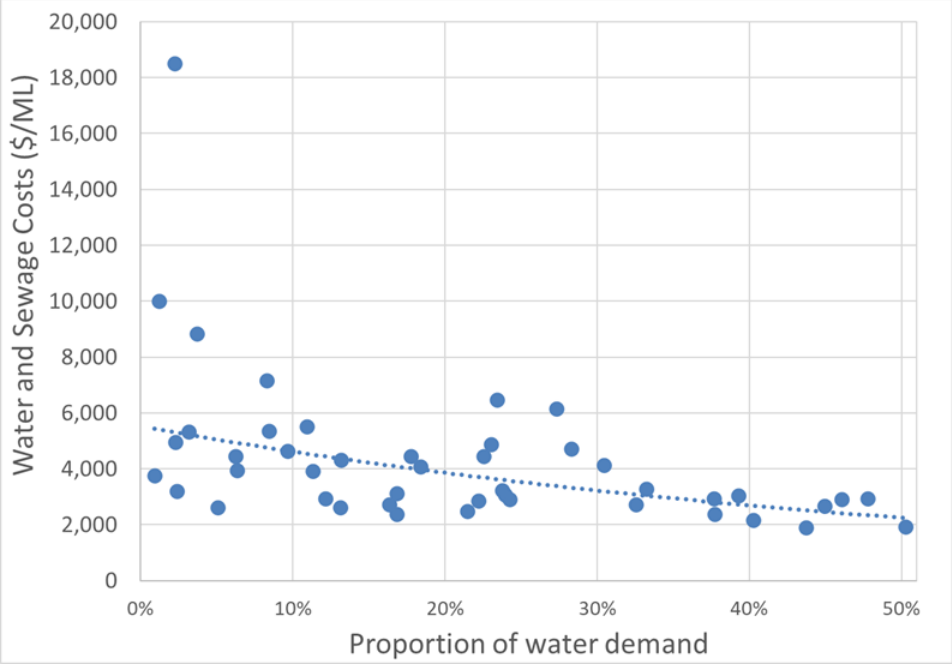

Figure 6: Spatial variation of annualised utility water and sewage costs for Greater Sydney to 2050 (2022 dollars) versus proportion of water demand generated by unit dwellings

[34] Clarke, R.M., & Stevie, R.G., 1981, A water supply cost model incorporating spatial variables, Land Economics 57(2), 18-32.
[35] Barry, M.E., and Coombes, P.J., (2018), Planning resilient water resources and communities: the need for a bottom-up systems approach, Australasian Journal of Water Resources, 22(2), 113-136.
[36] Coombes, P. J., (2022), A systems perspective on characterising resilience in urban water markets, OzWater 2022, Australian Water Association, Brisbane, Australia.

The Greater Sydney region experiences the highest utility costs in the growth corridors that are distant from water sources and sewage treatment infrastructure. Sydney's water saving targets and higher density development may have reduced the utility costs for inner city locations. These results also represent the different water and wastewater treatment costs throughout the region.

Figure 6 highlights that the inner Sydney locations (the Sydney Basin) with more multi-unit buildings are associated with lower average utility infrastructure costs $3216/ML (range: $1939 - $6467/ML) than other areas with more detached housing with average costs of $4888/ML (range: $2375 - $18,516/ML). These results indicate that the multi-unit buildings are associated with lower net present costs of providing utility services.

The average utility infrastructure costs from local government areas where water demand from units is greater than 40% of total water demand is $2463/ML. In contrast the average utility infrastructure costs are $6370/ML in areas where water demand for units is less than 10% of the total water demand.

This information was combined with econometric methods to estimate the relative utility infrastructure costs for units (brownfield) and detached dwellings (greenfield) of $440 and $1058 per dwelling. These indicative values were used to consider the potential impacts on Sydney Water of a change in pricing policy to support rental units in multi-unit buildings.

It is noteworthy that the proportions of water demand from detached dwellings, units and non-residential end users varies throughout the Greater Sydney region. The costs of servicing these end users are also dependent on location.

5.3 Sydney Water costs and revenue

Apartments and units are an increasing proportion of the Sydney's housing stock. The lower water use in units and the BASIX policy has contributed to an 8.4% decline in total water demand for the Greater Sydney region in response to a 29.6% growth in connected water services since 2003 (Figure 6).[37] Sydney households have experienced an 1.8% real increase in typical water utility bills since 2003.

[37] Coombes P.J., (2024), The influence of regulation on preference for utility infrastructure investment to generate income for Australian water corporations, Australasian Journal of Water Resources, 28(2), 151-172.

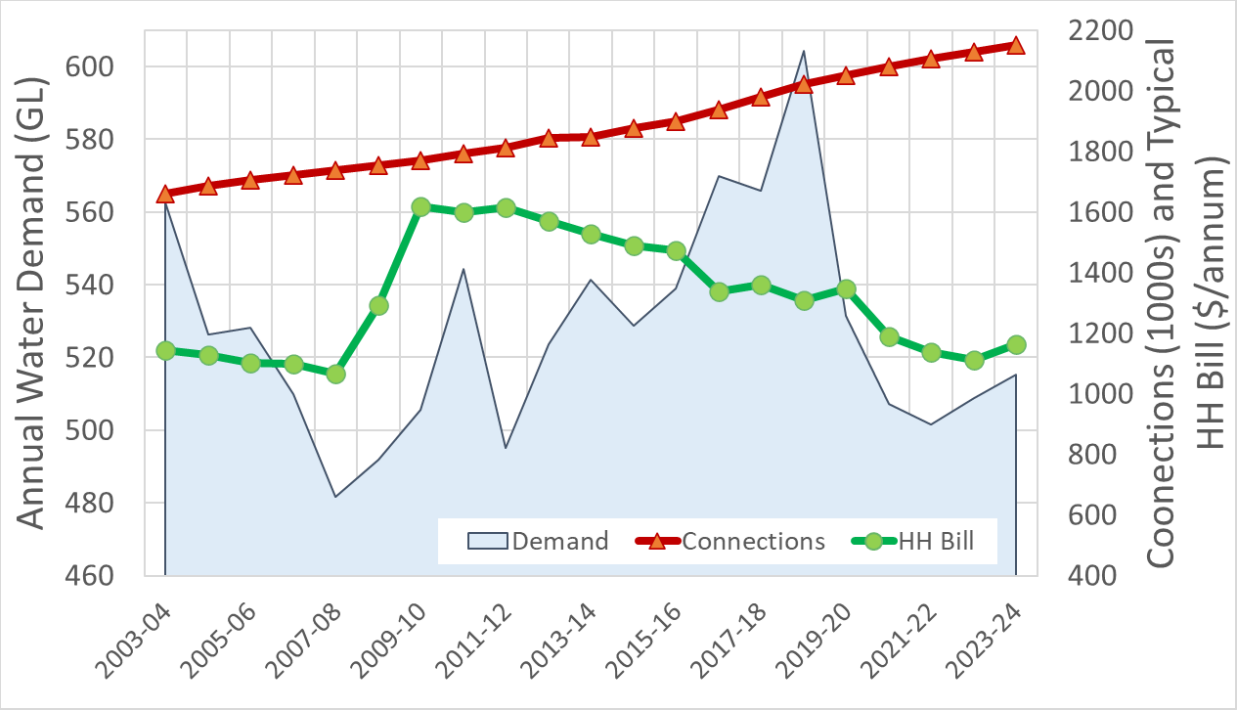

Figure 7: Water demands, water connections and real household utility water bills (2024 dollars)

Figure 7 demonstrates reductions in total urban water demand with real increases in household utility bills in response to substantial growth in water connections since 2003. Whilst the low interest and inflation environment since 2010 has assisted to limit real growth in utility water bills and costs, the increasing water efficiency of households has also contributed to this outcome.[38]

The lower water demands and sewage discharges from an increasing portfolio of unit dwellings has contributed to these more efficient results. The overall financial position of Sydney Water was examined to further understand the trajectory of utility costs.

Price regulation of Sydney Water services is based on the building block or rate of return methodology that is linked to regulated asset values and costs. The historical record of the Regulatory Asset Base (RAB) and Nominal Revenue Requirement (NRR) for Sydney Water from 2000-01 to 2023-24 was sourced from Sydney Water Annual Reports and IPART Price Determinations (see Coombes, 2024 for more detail). The NRR is the revenue that the utility is permitted to earn via price determinations.

The historical (CPI adjusted) 2024 dollar values for Sydney Water's RAB and NRR with the key explanatory variables of depreciation, net capital and operation expenses, and return on assets are presented in Figure 8.

[38] Coombes, P. J., (2022), Modelling the impact of changes to BASIX, Report to the Department of Planning, Industry and Environment

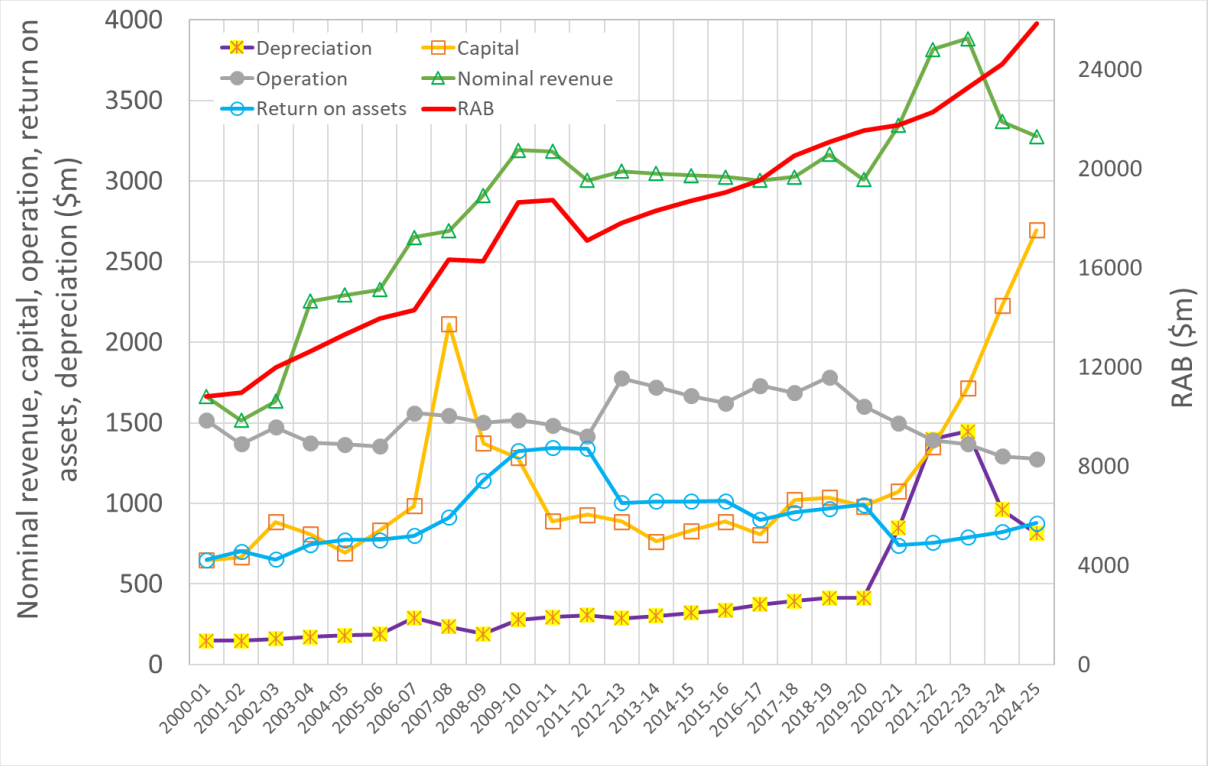

Figure 8: The CPI adjusted values (2024 dollars) for the regulatory asset base (RAB) and nominal revenue (NRR) for Greater Sydney with capital, operation and depreciation expenses, and return on assets for the period 2000-01 to 2023-24.

Figure 8 reveals 139% real (CPI adjusted) growth in the RAB and 97% increase in revenue (NRR) for Sydney Water. Growth in the RAB was driven by 316% increase in capital expenses and 453% growth in depreciation costs, and a 16% decrease in operating costs. It is noteworthy that Sydney Water's capital expenses have unusually grown rapidly by 175% since 2019-20. This change in capital expenditure has driven higher values for the RAB and NRR.

Some of the infrastructure created for new developments is not paid for by the utility and not directly included in the RAB. These assets are incorporated over time in the asset base as a requirement for depreciation, replacement and renewal. The value (2022 dollars) of these "gifted assets" to Sydney Water has increased from AUD $103 million in 2011/12 to AUD $236 million in 2020/21 and are a significant proportion of infrastructure investment from developers that has increased from 13% to 27% of capital expenses.

The strong growth in the RAB and expected increases in the Weighted Average Cost of Capital (WACC) associated with higher interest rates are expected to provide higher revenue outcomes for Sydney Water. For example, the IPART (2020) price determination was based on a WACC of 3.4% and the Australian Securities Exchange (ASX) currently lists a WACC of 7.5% for Australia.

Assuming a value of $30 billion for the RAB, this change in WACC could equate to an $1230 million annual increase in regulated revenue to Sydney Water. The future value

of this potential increase in revenue may be impacted by higher inflation rates. Nevertheless, it is expected that Sydney Water will earn greater revenue from its RAB, whilst the increasing efficiency of residential water demands and sewage discharges will diminish growth in utility costs.

The average annual revenue (Tables 15 and 16) with the net present costs for Sydney Water to provide water and wastewater services to units in brownfield area versus detached dwellings in greenfield areas are presented in Table 17.

Table 17: Comparison of annual average utility revenue and costs for units in brownfield areas and detached dwellings in greenfield areas of Greater Sydney

Item	Average annual costs ($/dwelling)	
	Units (Brownfield)	Houses (Greenfield)
Revenue	1003.08	1221.85
Costs	440	1058
Profit	563.08	163.85

Table 17 demonstrates that Sydney Water's average costs and revenue to provide services are lower for units in brownfield areas. This translates to higher profits from servicing units in brownfield areas.

It is proposed that the lower costs of servicing units in multi-unit buildings is influenced by the contributions of Building Owners to providing these services.

6 Towards equitable tariff structures

This investigation seeks to address the tariff structures that should apply to the Building Owners of multi-unit buildings that provide rental apartments to residential tenants. The Building Owner operates and distributes services to tenants via private infrastructure networks within buildings and provides billing, administration and customer services to tenants.

In this context, the Building Owner is the local service provider within multi-unit buildings and is the landlord to the units within the building. This is different to the relationship between a landlord and a tenant for a single residential dwelling that receives services from others.

The value of current (2024-25) annualised costs and recoverable items to building owner Meriton and to Sydney Water for each unit in a multi-unit building is provided in Figure 9.

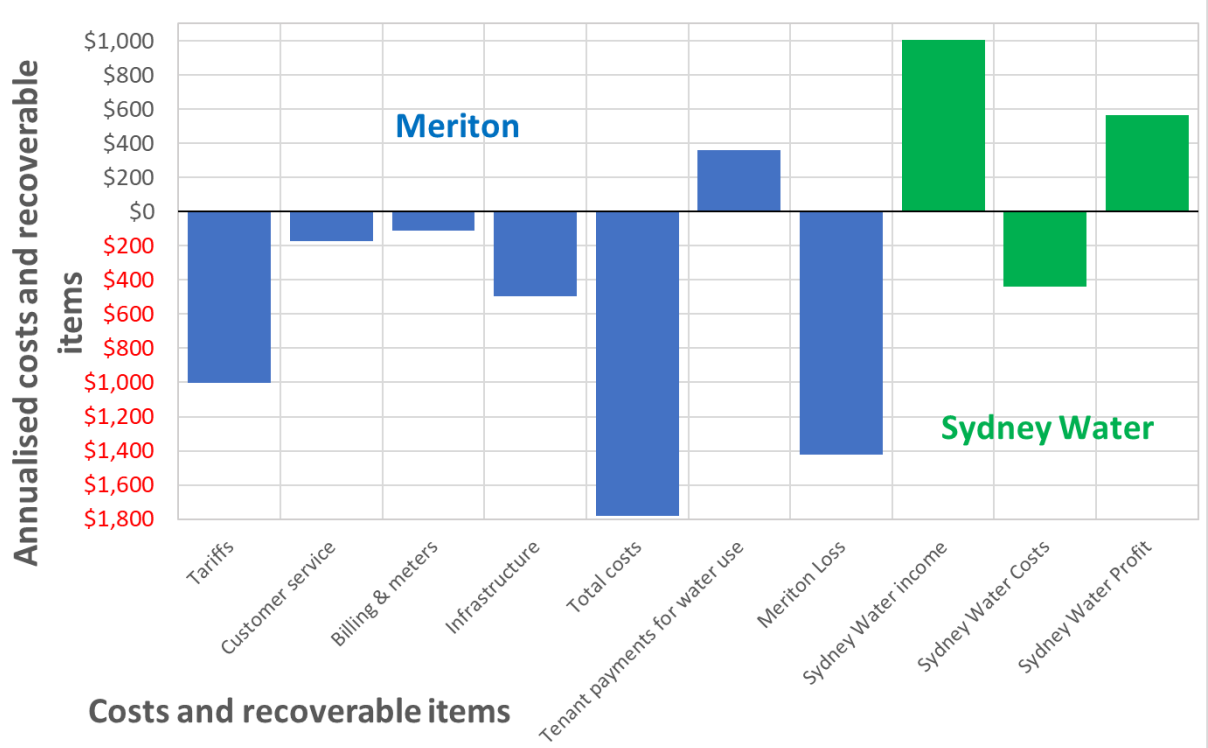

Figure 9: Current (2024-25) annualised value of costs and recovery items of providing water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin (4% discount rate and 30 year horizon)

Figure 9 reveals that Meriton currently incurs annualised costs, income and loss of $1782, $358 and $1424 per residential unit for provision of water, sewage and stormwater services within multi-unit buildings. These costs do not include the annual costs of $955 per unit for replacement and maintenance of plumbing within residential units. The estimated annual average income, costs and profits to Sydney Water was $1003, $440 and $563 per unit in the Sydney Basin.

The value of the proposed (2029-30) annualised costs and recoverable items to building owner Meriton and to Sydney Water for each unit in a multi-unit building is provided in Figure 10. It was assumed that Sydney Water costs increase by 30% above inflation in accordance with expenses in the pricing submission. No real increase was assigned to Meriton costs.

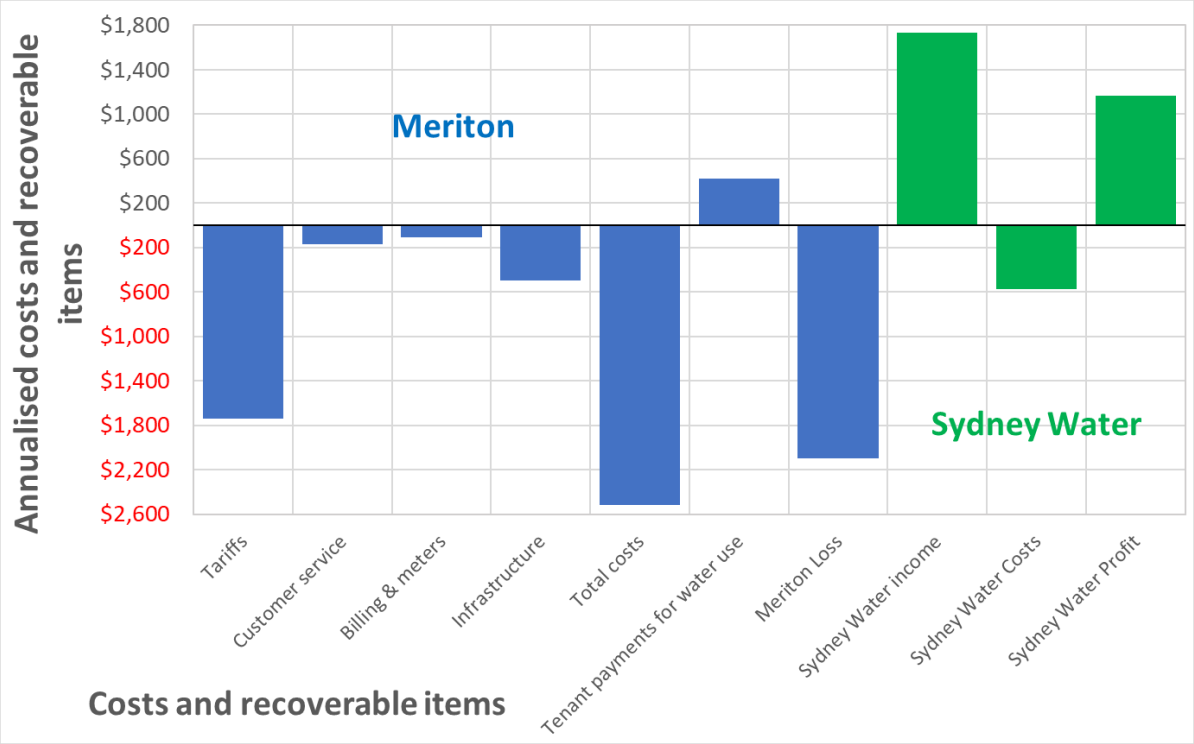

Figure 10: Proposed (2029-30) annualised value of costs and recovery items of providing water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin (4% discount rate and 30 year horizon)

Figure 10 demonstrates that proposed price increase to 2029-30 results in annualised costs, income and loss of $2515, $418 and $2097 per residential unit for Merton's provision of water, sewage and stormwater services within multi-unit buildings. These costs do not include the annual costs of $955 per unit for replacement and maintenance of plumbing within residential units. The estimated annual average income, costs and profits to Sydney Water was $1736, $572 and $1164 per unit in the Sydney Basin.

The proposed Sydney Water price rises result in substantially higher losses to Merton in the provision of water, wastewater and stormwater services to multiple unit buildings. In turn, Sydney Water can expect large increases in revenue and profit in this market.

The dominance of fixed tariffs (103% increase) over usage charges (18% increase) in the Sydney Water pricing submission also removes the Building Owner and tenant opportunity to manage costs by reducing water demands and associated wastewater discharges.

This inequitable arrangement can be addressed by recognising that the Building Owner is providing retail services and distribution infrastructure within buildings, and the Water Utility is providing bulk services to buildings. This arrangement currently applies to retail, office and commercial buildings.

In this situation, building owners are operating as commercial retailers of residential water, sewage and stormwater services that are provided, in bulk, to the property boundary by the Water Utility. It is proposed that the Building Owner can pay commercial tariffs for the water, sewage and stormwater services delivered to the property boundary by the Water Utility.

The Australian Energy Regulator has recognised that Building Owners of multi-unit buildings distribute services to tenants of rental apartments within buildings. The energy utility provides bulk services to the building and the Building Owner distributes those services to residential tenants within the building.

The Building Owner as a commercial provider of residential services pays commercial tariffs to the energy utility at the master meter and can pass on those fixed and usage tariffs to units with individual meters. The Residential Tenancies Act 2010 (NSW) has been amended to reflect this decision.[39]

Recognising that the owner of multi-unit residential buildings as a commercial user of Sydney Water services is a more equitable arrangement. Meriton is not asking for Sydney Water to reimburse the losses incurred in providing these retail services.

These fixed and usage tariffs should be based on readings at the master meter in accordance the published Water Utility rates for commercial services. The practice of charging fixed tariffs to the Building Owner for every unit within the building should be discontinued because a significant proportion of these local services are provided by the Building Owner.

The Building Owner should be permitted to pass on the reasonable proportion of fixed tariffs for water and sewage services to the residential end users in the building. The Building Owner as the retailer should also be permitted to charge an agreed fixed tariffs for services to units. The commercial fixed tariffs at the building master meter should be equally proportioned between all individual meters within the building.

It is proposed to continue with the installation of individual meters on units to facilitate sustainable water use practices and equitable billing processes for tenants. The Building Owner should continue to recover water usage tariffs from tenants based on individual meter readings.

These individual meter readings can also be used to recover sewage usage tariffs from tenants at agreed rates provided by the regulator, or at commercial rates (currently $1.36/kL and a sewage discharge factor of 0.94).

[39] Ibid n4, s 38(1)

The annualised value of costs and recovery items of these proposed changes to pricing policy to building owner Meriton and to Sydney Water for each unit in a multi-unit building for current 2024-25 prices is provided in Figure 11.

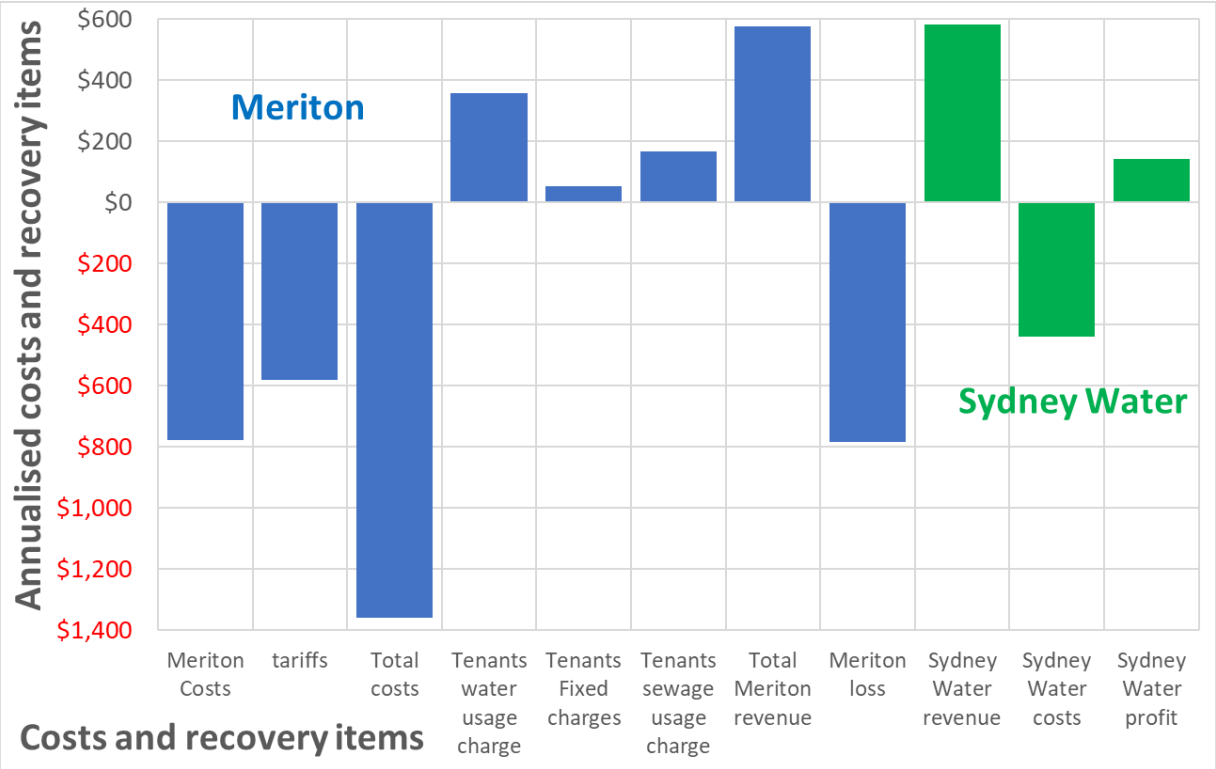

Figure 11: Annualised costs and benefits of the proposed new pricing policy for water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin (4% discount rate and 30 year horizon) for 2024-25 prices

Figure 11 demonstrates that the proposed new pricing policy results in average annual costs, income and losses of $1360, $574 and $786 per unit for Meriton under the 2024-25 pricing regime. The estimated annual average costs, income and profits to Sydney Water becomes $440, $582 and $142 per tenanted units in multi-residential buildings located in the Sydney Basin. The difference in the income accruing to Sydney Water is associated with the commercial fixed and usage tariffs for sewage services.

The proposed average annual tariffs to the tenants of units in multi-unit buildings is $582. This is based on an equal share of the commercial fixed tariffs and the individual metered water usage with associated sewer usage tariffs. Importantly, the water and sewage usage charges paid by tenants will vary with measured water use at the individual water meter.

The annualised value of costs and recovery items of these proposed changes to pricing policy to building owner Meriton and to Sydney Water for each unit in a multi-unit building for proposed 2029-30 prices is provided in Figure 12.

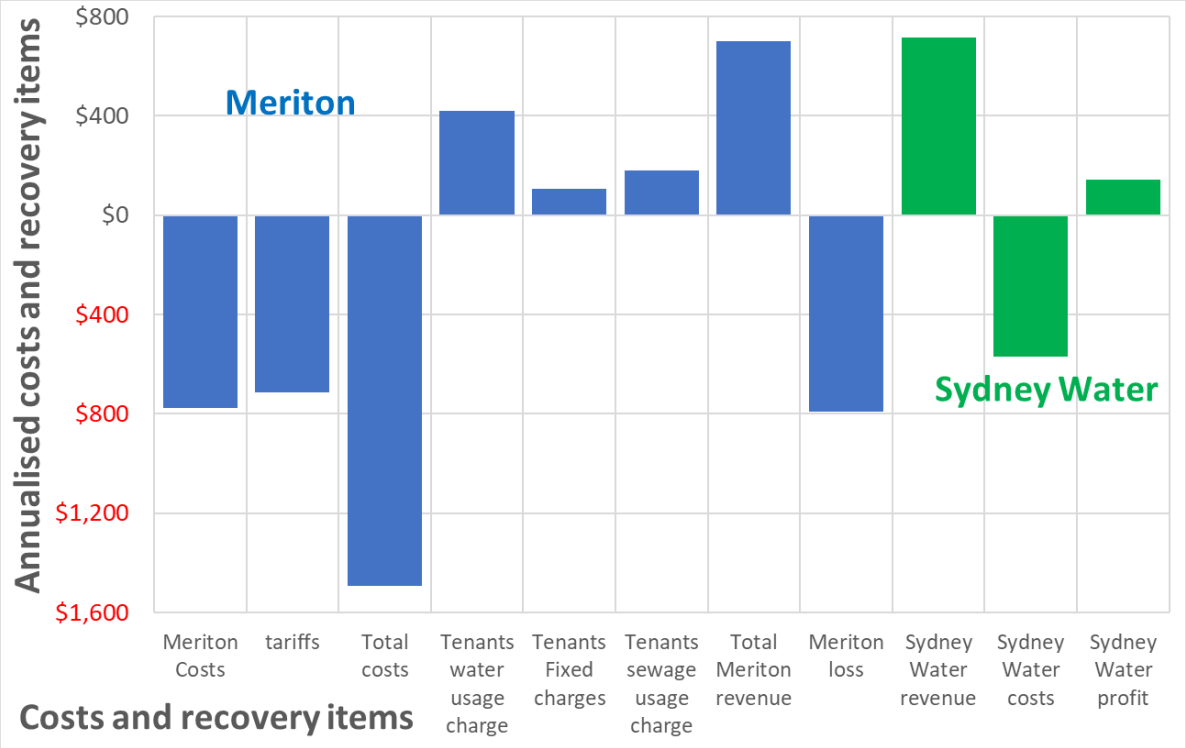

Figure 12: Annualised costs and benefits of the proposed new pricing policy for water, sewage and stormwater services to a unit in a multi-unit building in the Sydney Basin (4% discount rate and 30 year horizon) for 2029-30 prices

Figure 12 shows that the proposed new pricing policy results in average annual costs, income and losses of $1494, $701 and $793 per unit for Meriton under the proposed 2029-30 pricing regime. The estimated annual average costs, income and profits to Sydney Water becomes $572, $715 and $144 per tenanted units in multi-residential buildings located in the Sydney Basin.

Apartments and units are an increasing proportion of the Sydney's housing stock. The lower water use in units has contributed to an 8.4% decline in total water demand for the Greater Sydney region in response to a 29.6% growth in connected water services since 2003.

7 Challenges in Development Approvals

The provision of rental housing in multi-unit buildings to the Greater Sydney region is impacted by delays in development approvals and the addition of developer charges to the costs of providing housing.[40]

Sydney is experiencing a crisis in housing supply and affordability that coincides with unusually weak growth in wages. The housing industry is experiencing record low approvals and completions which increases the prices of housing and rents.[41]

In turn, citizens encounter persistent unemployment and under-employment with low real wage growth.[42] An environment of ongoing wage stagnation and price inflation is adding to the lasting negative socioeconomic and economic impacts of diminished housing affordability.

It is not an ideal time to increasing the costs of providing housing and the costs of living in housing whilst removing the user pays opportunity to reduce water use and associated Sydney Water bills.

The processes of seeking development approval from Sydney Water encounters substantial delays with associated time costs for the following reasons (example from recent large Meriton projects):

1. A lengthy process of Building Plan approvals that occurred three months after a Development Application was approved causing delay in commencement of basement and excavation works.
2. A long wait (over five months) for the issuing of the Notice of Requirements which then caused delays to the finalisation of Flow Management Plans.
3. More than three month delay in the approval of Flow Management Plans.
4. Sydney water design approvals are subject to lengthy delays due to the realignment in corporate processes so that the account manager for the Building Owner can no longer control this process.

The financial costs of time delays of one year from the approval authority were approximated as 4% of the average value of each unit at $45,900/unit. These delays and costs diminish the availability and affordability of housing.

Developers contribute local infrastructure "free of charge" to Sydney Water according to the Authority's specifications and oversight. Sydney Water operate and manage this infrastructure as part of their regulatory asset base.

[40] UDIA (2023), Reintroduction of Sydney Water DSP Developer Charges, 7 July 2023
[41] Urban Taskforce Australia (2024), October Housing Approvals – a huge task ahead, 2 December 2024
[42] Stewart A., Stanford, J and Hardy T., (2023), The wages crisis revisited, The Australia Institute Centre for Future Work.

An entirely different circumstance applies to the Building Owners multi-unit buildings that provide rental accommodation. The Building Owner is solely responsible to provide, operates, maintains and replaces the local infrastructure within buildings or the property (see Section 3 for more detailed discussion of the responsibilities of the Building Owner and Sydney Water) without receiving statutory or financial recognition for providing this service.

The Building Owner is responsible for local infrastructure but encounter delays in approvals and is also required to pay development servicing levies to Sydney Water. These development servicing leveis range from $2000 to $7000 per unit dwelling in Central Business District and Inner West of Sydney.[43]

Additionally, the proposed pricing policy and its implementation exacerbate these challenges, further straining the ability of developers and building owners to offer affordable housing options. These financial burdens significantly impact housing supply and affordability in Greater Sydney.

Urgent reforms are needed to streamline approval processes, reduce unnecessary delays, and reassess pricing policies to ensure stability and affordability in Greater Sydney's rental market.

[43] UDIA (2023), Reintroduction of Sydney Water DSP Developer Charges, 7 July 2023

8 User pays pricing is more equitable and efficient

The Sydney Water Pricing Submission asks for the 103% increase in fixed tariffs and 18% higher water usage charges to the end of the 2029-30 financial year. This proposal removes most of the user pays opportunities from the pricing policy and removes the incentive to save water as shown in Figure 13.

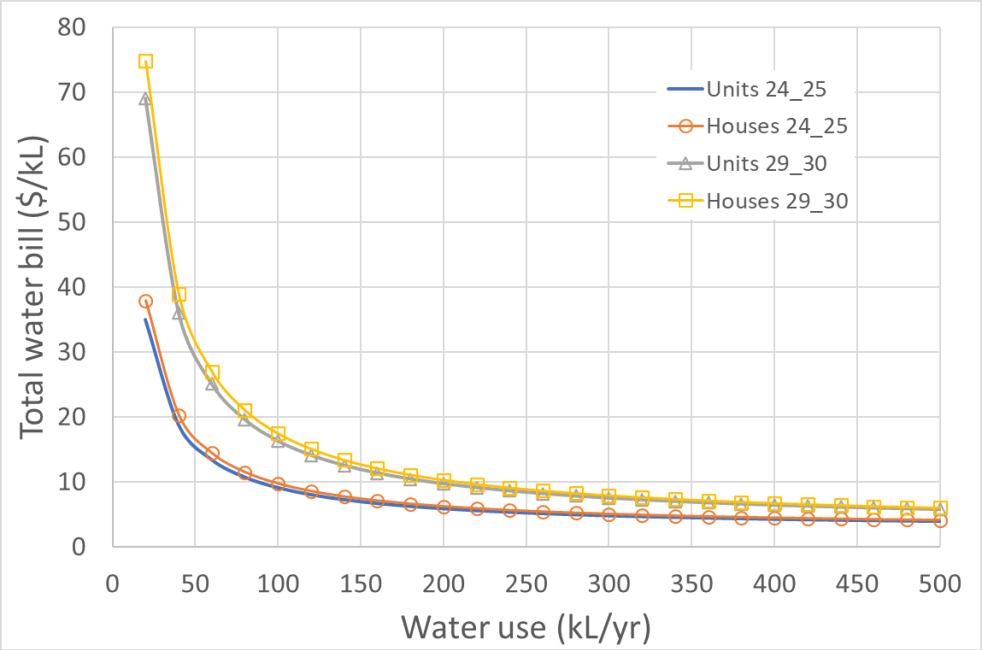

Figure 13: Impact of the proposed Sydney Water 2024-25 and 2029-30 prices on units and houses

Figure 13 shows that low water use in units and houses attract a heavy penalty for their efficient contribution to improving the resilience of Sydney's water supply and wastewater systems. The proposed prices effectively remove the incentives to save water as summarised in Table 18

Table 18: Impact of the proposed Sydney Water 2024-25 and 2029-30 prices on units and houses

Water Use (kL/year)	Total bill for water, sewage and stormwater services ($/kL)			
	Units 24_25	Houses 24_25	Units 29_30	Houses 29_30
40	18.79	20.29	36.08	38.95
100	9.12	9.72	16.30	17.45
140	7.28	7.71	12.54	13.36
200	5.89	6.19	9.71	10.29
300	4.82	5.02	7.51	7.90
400	4.28	4.43	6.42	6.70
500	3.96	4.08	5.76	5.99

Table 18 demonstrates that the Building Owner of multi-unit buildings providing rental accommodation will contribute to payments to Sydney Water of $18.79 – $7.28/kL in 2024-25 and $36.08 - $12.54 in 2029-30.

In contrast, the bills for houses will be $7.71 - $5.02/kL in 2024-25 and $13.36 - $7.90/kL in 2029-30. These results shown a strong wealth transfer from units to houses (cross subsidy) in the proposed prices. The magnitude of this wealth transfer increases into the future and presents as economically inefficient with increasing inequity.

The removal of economic incentives to save water will have a heavy impact on Building Owners of multi-unit buildings who are required to demonstrate water efficient outcomes from their rental accommodation.

The Author's research demonstrates that the application of full usage charges (no fixed tariffs) for water and sewage services provides substantial economic benefits to the water utility, improved household welfare and reduced impact on the environment.[44]

The prices proposed by Sydney Water and the pricing framework supported by IPART is not a dynamic economic mechanism that permits customers to maximise their welfare by reducing water use and associated wastewater discharges. The dominance of fixed tariffs in the proposed prices does not adequately provide efficiency signals to the Utility and rewards high water use.

The Author's previous work on these important challenges of economic efficiency and equity for customers was acknowledged in the previous IPART price determination for Sydney Water.[45]

This research was presented as the spatial costs and prices of water, sewage and stormwater services to Greater Sydney (See Appendix A for maps of costs and prices) to highlight the strong spatial cross subsidies that apply. These spatial differences in costs highlight the opportunities to manage costs that cannot be understood by average analysis as demonstrated by Barry and Coombes (2018).

A full usage charges policy was shown to generate substantial reductions in the growth of water demands (10%), sewage discharges (5%) and costs incurred by Sydney Water to 2050.[46] These benefits included a significant deferral of the need for water security augmentation of the water supply and wastewater systems at the net present value of $5.2 billion. This strategy provides for small decrease in the revenue growth that coincides with a larger decline in cost growth for Sydney Water. A $1 reduction in revenue coincided with a $7 decrease in costs.

[44] Coombes, P. J., (2022), A systems perspective on characterising resilience in urban water markets, OzWater 2022, Australian Water Association, Brisbane, Australia.
[45] IPART, (2020), Review of prices for Sydney Water from 1 July 2020, pp. 99-100, 108, 288, Box L1
[46] Urban Water Cycle Solutions and Kingspan Water and Environment (2020), Alternative water strategy for Sydney, September 2020.

However, these calculated water and wastewater usage changes ($5 - $7/kL) can be applied as a single rate to entire residential sector (at say $6/kL). This simpler and fairer pricing policy can also apply to the non-residential sector using wastewater discharge factors.

The potential full usage charges of $5/kL to $8/kL are compared to proposed tariffs in Figure 14.

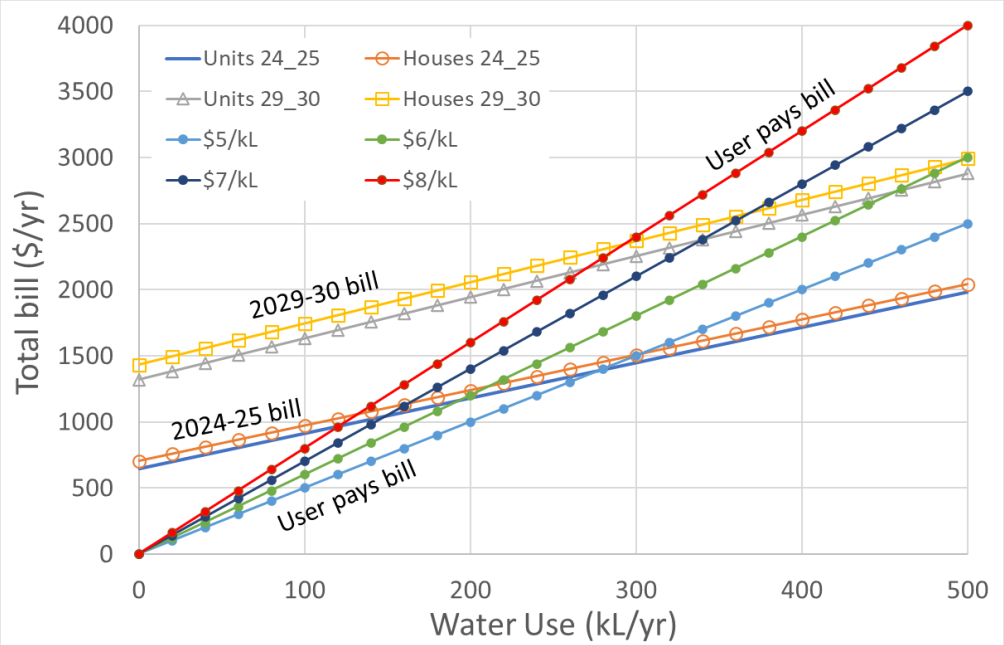

Figure 14: Impact of usage charges versus the proposed tariffs on total water and sewage bills

Figure 14 shows that the usage charges provide incentive to reduce water use and a fair opportunity to improve household welfare. These usage charges will provide strong incentive and rewards to households and building owners that reduce water use and wastewater discharges.

These actions improve the resilience of the Sydney system to the impacts of climate change and population growth. It is recommended that a $6/kL usage charge for combined water and wastewater demands is applied to multi-unit buildings providing rental accommodation. This arrangement will assist Building Owners to minimise the impacts on multi-unit buildings on Sydney's water resources.

The Building Owners and Sydney Water can then collaborate on the best price settings during the next regulatory period. This process acknowledges that Building Owner provide and are responsible for all local infrastructure and Sydney Water is the bulk provider of water and wastewater services. The comprehensive monitoring associated with all multi-unit buildings could form the basis of an annual review of prices that is agreed between Building Owners and Sydney Water.

9 Conclusions

The Independent Pricing and Regulatory Tribunal (IPART) regulates the tariffs that Sydney Water can levy on the properties for the provision of water, sewage and stormwater services. The Residential Tenancies Act 2010 (NSW) provides regulations for the recovery of costs of providing services to tenants and landlords.

Sydney Water has submitted a proposal for revenue and price increases across the 2025-30 regulatory period to IPART. A 103% increase in fixed tariffs and 18% higher usage charges are proposed by Sydney Water in a departure from the principles of user pays pricing. This proposal minimises the opportunity for dwelling to save water to reduce impacts on household welfare, state infrastructure and the environment.

The proposed price regime results in low water using units paying as much as $19/kL (2024-25) and $36/kL (2029-30) for water and wastewater services. This is a strong disincentive to reduce water use and improve the resilience of Sydney to climate change. In addition, the dominance of fixed tariffs diminishes the drivers for economic efficiency by utility and does not assist the Building Owner to contribute to more sustainable outcomes.

Greater Sydney's housing stock currently includes increasing proportions of residential units and apartments (31%) that are associated with diminishing demands for water and sewage services. The region's water demands have decreased by 8.4% in responses to an 29.6% increase in water connections since 2003.

There is a shortage of rental apartments (less than 1.6% vacancy rate) in the Greater Sydney region resulting in higher rents (13.8% higher since 2021 and 38% increase since 2015). Sydney is experiencing a crisis in housing supply and affordability that coincides with unusually weak growth in wages. The housing industry is experiencing record low approvals and completions which increases the prices of housing and rents.

It is not an ideal time to increasing the costs of providing housing and the costs of living in housing whilst removing the user pays opportunity to reduce water use and associated Sydney Water bills.

The provision of rental apartments in multi-unit buildings also encounters substantial financial barriers which impacts on the availability of affordable rental accommodation.

The estimated average annual water utility costs (2024-25) to provide water, sewage and stormwater services to units in the Sydney Basin of $440 are less than the cost to service detached housing in greenfield area of $1058.

The owner and operator of the multi-unit building provides services to tenants via the private water and sewage networks within the buildings. A Building Owner of multi-unit buildings provides all the local services to tenants within the buildings which reduces the Water Utility's cost of providing services to rental units in multi-unit buildings.

This is different to the relationship between a landlord and a tenant for a single residential dwelling that receives services from others.

Meriton provide residential apartments for rent in multi-unit buildings. As the building owner and landlord, they provide water, sewage and stormwater services to tenants, and pay Sydney Water tariffs on behalf of tenants at residential rates. The only costs that can be passed on to the tenants of units is for water usage where individual meters are installed. Meriton incurs substantial average annual losses of $1424/unit (2024-25) to $2097/unit (2029-30).

It is proposed that the Building Owner can pay commercial tariffs for the water, sewage and stormwater services delivered to the property boundary by the Water Utility.

The Australian Energy Regulator and the Residential Tenancies Act 2010 (NSW) has recognised that Building Owners of multi-unit buildings distribute services to tenants of rental apartments within buildings. The Building Owner should be charged commercial tariffs and can recover these tariffs from tenants of units with individual meters.

Similarly, the Building Owners of multi-unit buildings with non-residential tenants pay commercial rates for water, sewage and stormwater services at the property boundary, and pass on these tariffs to tenants.

It is proposed to recognise that Building Owners of multi-unit buildings are providing commercial services to rental apartments, and should pay commercial tariffs for water, sewage and stormwater services at the master meter.

Four key changes in price regulation are proposed which improve the equity of the services provided within multi-unit buildings that provide rental accommodation.

Firstly, the Building Owner should pay commercial fixed and usage tariffs at the property boundary to the Water Utility. This will reduce the losses incurred by Building Owners in providing retail services to residential tenants within buildings.

Secondly, the individual meters at units can be used by Building Owners to recover tariffs for water and sewage use based on agreed rates. The default tariff should be the commercial rate charged to the Building Owner. In addition, the Building Owner should be able to charge regulated fixed tariffs to tenants that is equally proportioned across individual meters.

Whilst these measures will not eliminate all the losses incurred by Building Owners in providing water, sewage and stormwater services, it will provide a more equitable balance in the pricing regimes. These charges will provide a more equitable pricing solution for the owners of residential-multi-unit buildings which align with other asset classes and help to support the urgent need to deliver high volumes of rental apartment accommodation in Sydney.

An important third measure is proposed. Application of a **full usage charge** of $6/kL for water and wastewater services (with no fixed tariffs) is proposed for all residential dwellings in Sydney for the 2025-30 regulatory period.

This initiative will foster water efficient behaviours from Sydney's households whilst providing strong opportunities for families to reduce water use to improve household welfare and environmental impacts.

It is proposed that progress on water demands, wastewater discharges and Sydney Water revenue will be reviewed by Sydney Water and IPART on an annual basis. The usage charge could be reviewed each year.

Implementation of this user pays policy is expected to send the better price signal to Sydney Water and IPART on residential water use.

In the absence of full implementation, this full usage charge could apply to multi-unit buildings providing rental accommodation. The monitoring and management from Building Owners and Sydney Water can provide strong information about the performance of this simpler and more efficient pricing policy.

The fourth measure is removal of development servicing charges for proposed multi-unit buildings that provide rental accommodation. This action recognises that the Building Owner provides all the local infrastructure and water, wastewater and stormwater services within multi-unit buildings providing rental accommodation. The objective of this change is to incentivise greater supply of affordable rental accommodation.

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Appendix A

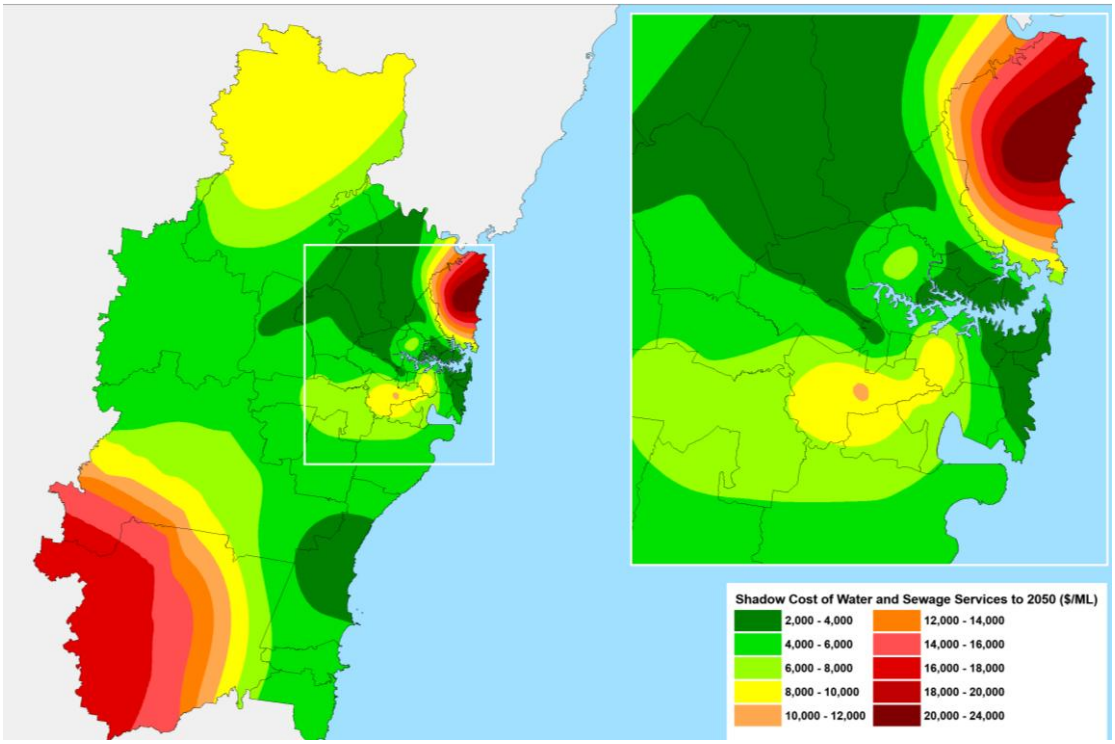

Figure A1: Spatial costs of water and sewage services to Greater Sydney

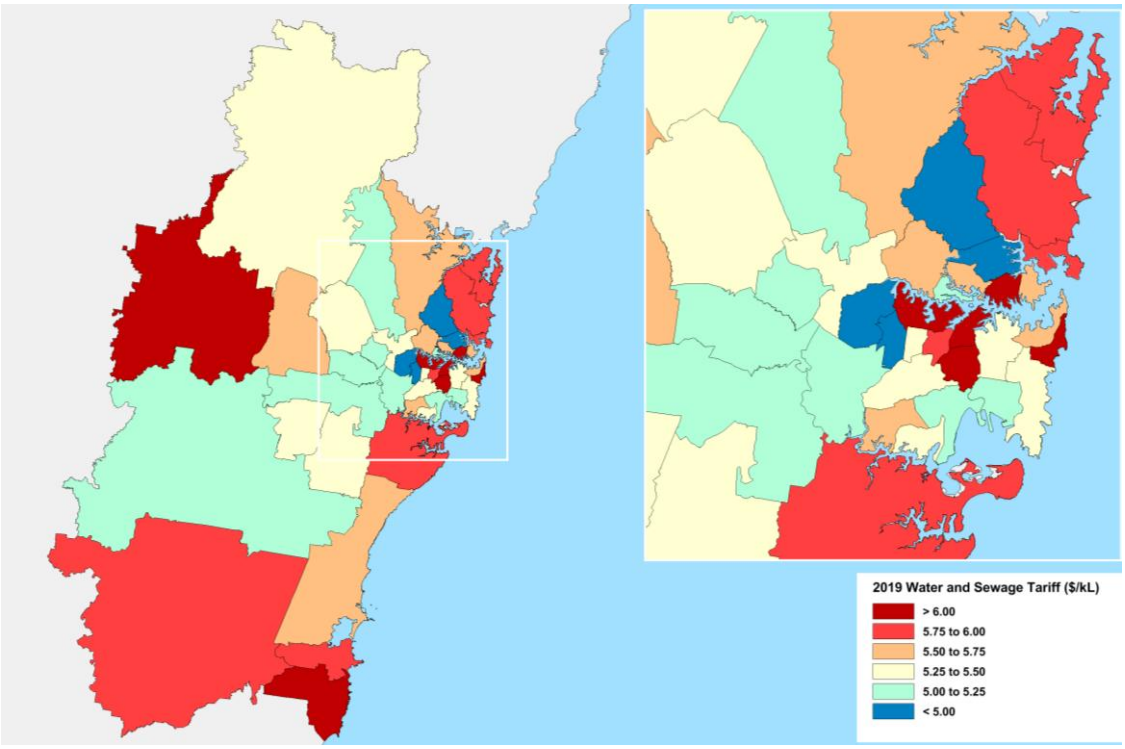

Figure A2: Spatial usage charges for water and sewage services to Greater Sydney