



Attachment 12

Tariff structure

30 June 2017

2018–23 Water and Sewerage Price Proposal



Quality drinking water



Reliable supply



Affordable pricing



Customer service



Environmental sustainability

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1 Summary

This attachment sets out Icon Water’s proposed price path and tariff structure reform. The proposal has been developed in accordance with the principles and preferred tariff features in the Independent Competition and Regulatory Commission’s (ICRC) 2016 Tariff Review final report.¹ It has also been shaped by community feedback through surveys, discussions with our Community Consultative Forum and targeted discussions with stakeholders. Icon Water proposes:

- a measured and gradual rebalancing of the water tariff structure, with increases of around \$20 each year in the annual water supply charge and a decrease in the Tier 2 water usage price from \$5.38 to \$4.95 per kilolitre (kL)
- flexibility to negotiate pricing agreements with large customers under specific circumstances, subject to approval from the ICRC
- retaining the existing sewerage tariff structure, with flexibility to introduce a trade waste charging regime during the 2018–23 regulatory period.

This approach takes initial steps towards improving economic efficiency without adversely impacting the combined water and sewerage bills of smaller water users. With the exception of trade waste customers, no customer would see bill increases materially higher than Consumer Price Index (CPI) growth under this proposal.

The impact on the combined water and sewerage bill of a typical residential customer would be \$27 per annum or 2.3 per cent in 2018-19, with similar impacts in each subsequent year of the 2018–23 regulatory period, assuming CPI growth of 2.5 per cent and no pass-through adjustments. Smaller customers would also see increases of around \$27 per annum. Larger customers would see bills decrease by up to 8.7 per cent in 2018-19, with increases below the rate of inflation each year thereafter.

Box 1-1: Key points

- Icon Water’s proposal involves a measured rebalancing of the water tariff, with reductions in the Tier 2 water usage charge and increases in the fixed supply charge.
- The existing sewerage tariff structure would be retained.
- Subject to ICRC approval, negotiated pricing agreements with large water customers and/or trade waste charging may be introduced during the 2018–23 period.
- Residential customer bills are expected to increase at a rate similar to CPI growth over the 2018–23 period.
- Large customer bills will decrease by up to 8.7 per cent.

Forecast water tariffs for each year of the 2018–23 regulatory period are set out in Table 1-1.

¹ ICRC, 2017: 1-90.

Table 1-1: Forecast water tariffs

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Supply charge (\$/annum)	104.21	120.00	140.00	160.00	180.00	200.00
Tier 1 for usage 0-0.548 kL/day (\$/kL)	2.68	2.73	2.76	2.79	2.81	2.84
Tier 2 for usage >0.548 kL/day (\$/kL)	5.38	4.95	4.95	4.95	4.95	4.95

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation and no pass-through adjustments.

Forecast sewerage services tariffs for each year of the 2018–23 regulatory period are set out in Table 1-2.

Table 1-2: Forecast sewerage services tariffs

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Supply charge (\$/annum)	537.34	541.84	546.39	550.97	555.59	560.24
Charge for flushing fixtures in excess of two (\$/annum)	525.51	529.92	534.36	538.84	543.35	547.91

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation and no pass-through adjustments.

Forecast impacts on water and sewerage bills for residential customers are set out in Table 1-3.

Table 1-3: Forecast residential bill impacts

	2018-19	2019-20	2020-21	2021-22	2022-23
Residential customer using 100 kL per annum					
Combined water and sewerage bill (\$ per annum)	935	962	990	1017	1044
Change in bill (\$)	26	27	27	27	27
Change in bill (%)	2.8	2.9	2.8	2.8	2.7
Residential customer using 200 kL per annum					
Combined water and sewerage bill (\$ per annum)	1,227	1,257	1,286	1,316	1,346
Change in bill (\$)	27	29	30	30	30
Change in bill (%)	2.3	2.4	2.4	2.3	2.3
Residential customer using 300 kL per annum					
Combined water and sewerage bill (\$ per annum)	1,704	1,733	1,763	1,793	1,823
Change in bill (\$)	-12	30	30	30	30
Change in bill (%)	-0.7	1.7	1.7	1.7	1.7

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

Forecast impacts on water and sewerage bills for non-residential customers are set out in Table 1-4.

Table 1-4: Forecast non-residential bill impacts

	2018-19	2019-20	2020-21	2021-22	2022-23
Non-residential customer using 1,000 kL per annum, with 10 fixtures charged					
Combined water and sewerage bill (\$ per annum)	9,926	9,996	10,066	10,136	10,207
Change in bill (\$)	-269	74	75	75	76
Change in bill (%)	-2.5	0.7	0.7	0.7	0.7
Non-residential customer using 7,000 kL per annum, with 10 fixtures charged					
Combined water and sewerage bill (\$ per annum)	39,626	39,696	39,766	39,836	39,907
Change in bill (\$)	-2,849	74	75	75	76
Change in bill (%)	-6.6	0.2	0.2	0.2	0.2
Non-residential customer using 7,000 kL per annum, with 100 fixtures charged					
Combined water and sewerage bill (\$ per annum)	87,318	87,788	88,261	88,738	89,219
Change in bill (\$)	-2,452	474	478	482	485
Change in bill (%)	-2.7	0.5	0.5	0.5	0.5

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

2 Introduction

2.1 What is tariff structure?

Tariff structure refers to the mix of charges Icon Water uses to recover the required revenue from water and sewerage customers. The tariff structure considers issues such as:

- whether the usage price should change when specified usage levels are reached
- the balance between fixed charges and usage prices
- whether tariffs should vary between different customer classes.

2.2 Our current tariff structure

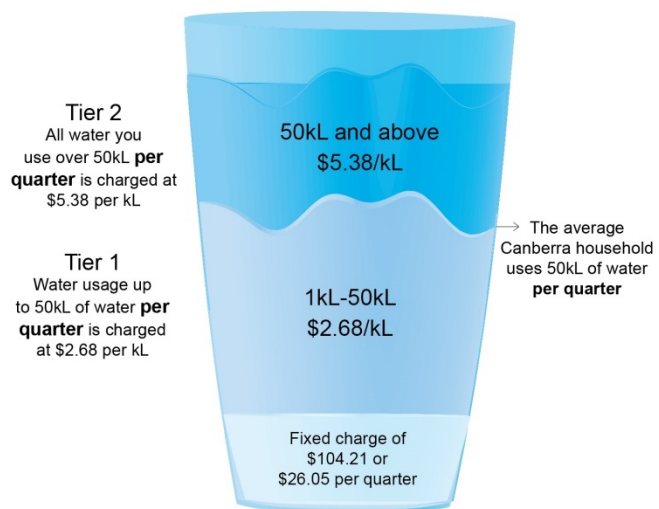
2.2.1 Tariff structure in 2017-18

The water tariff structure for 2017-18 comprises:

- a fixed supply charge of \$104.21 per annum, plus
- a two-tier water usage charge of \$2.68 per kL for the first 0.548 kL of average daily use and \$5.38 per kL thereafter.

The sewerage tariff structure comprises:

- a fixed supply charge of \$537.34 per annum, plus
- for non-residential customers and common properties, a charge on flushing fixtures (toilets) in excess of two of \$525.51 per annum.



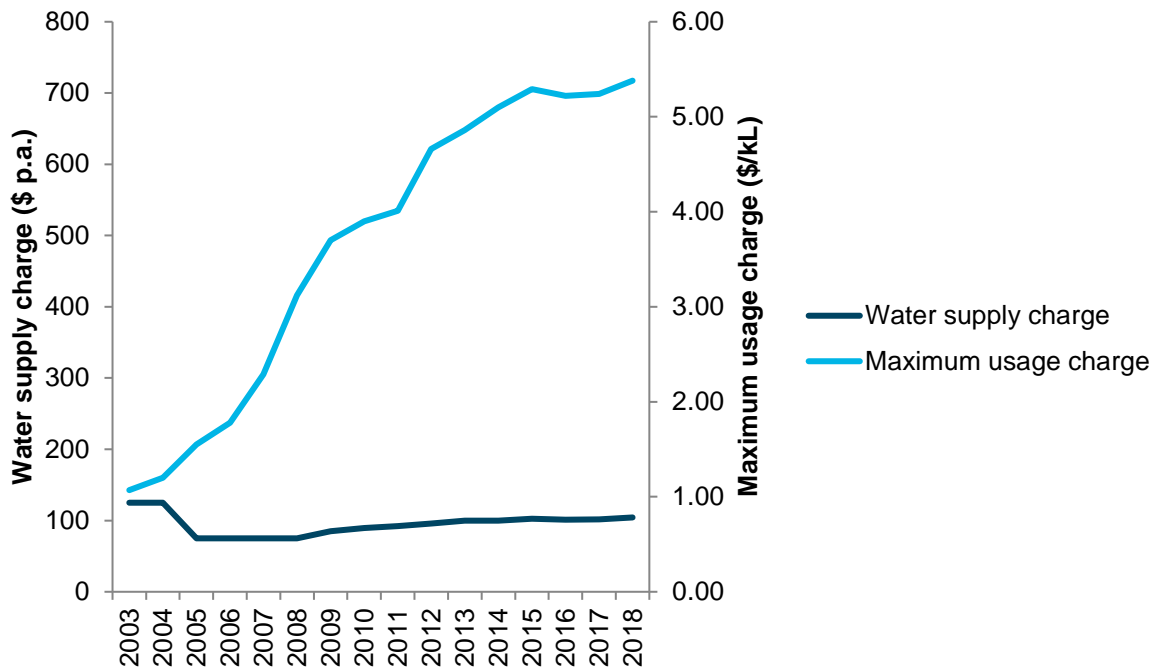
2.2.2 How we got here

Over the past 13 years, there has been a significant shift away from fixed charges towards usage charges. The top-tier usage price has increased by roughly 400 per cent over that period, while the fixed supply charge has decreased (see Figure 2-1). This shift has been driven by a number of factors, including the need to reduce water consumption during the Millennium Drought between 2003 and 2010.

2.2.3 Comparison with other cities

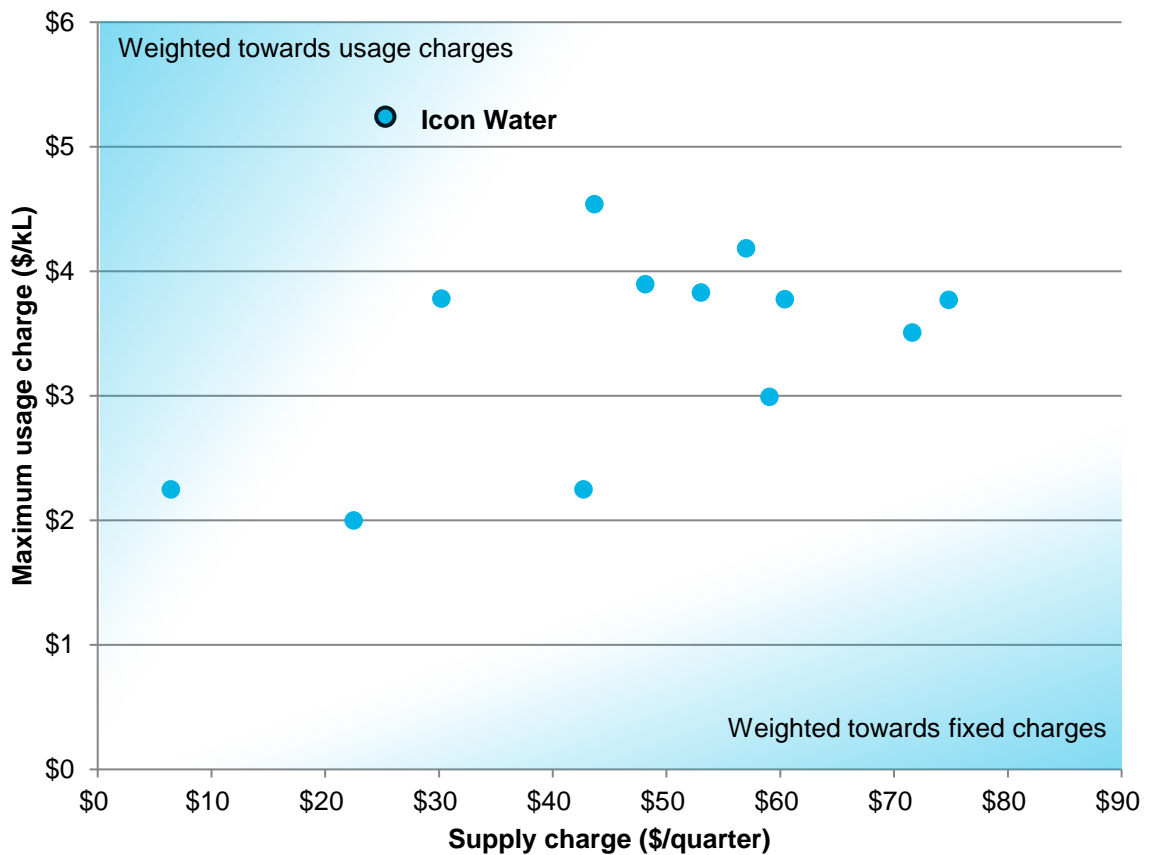
As a result of this shift, our Tier 2 water price is now the highest of any major water utility in Australia, while our fixed supply charge is one of the lowest (see Figure 2-2), particularly for non-residential customers.

Figure 2-1: The shift towards usage charges (\$, nominal)



Source: Icon Water.

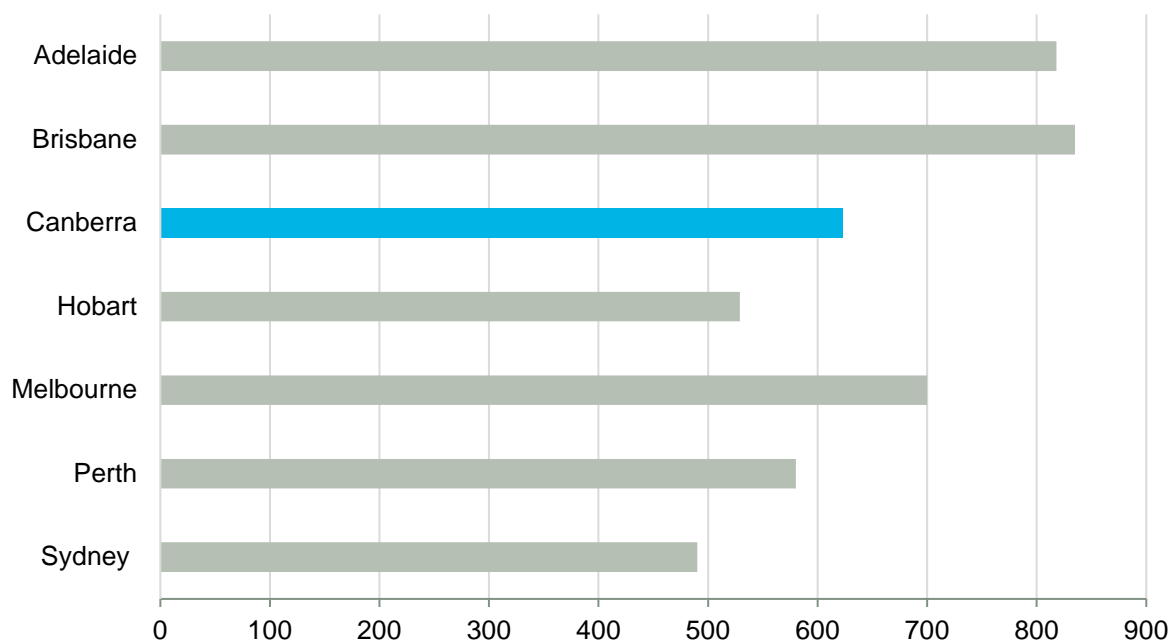
Figure 2-2: Residential supply and usage charges – Australian major water utilities 2016-17



Source: Water utility websites (>100,000 customers).

Water bills for average residential customers in Canberra are close to the middle of the range when compared to other capital cities in Australia (see Figure 2-3).

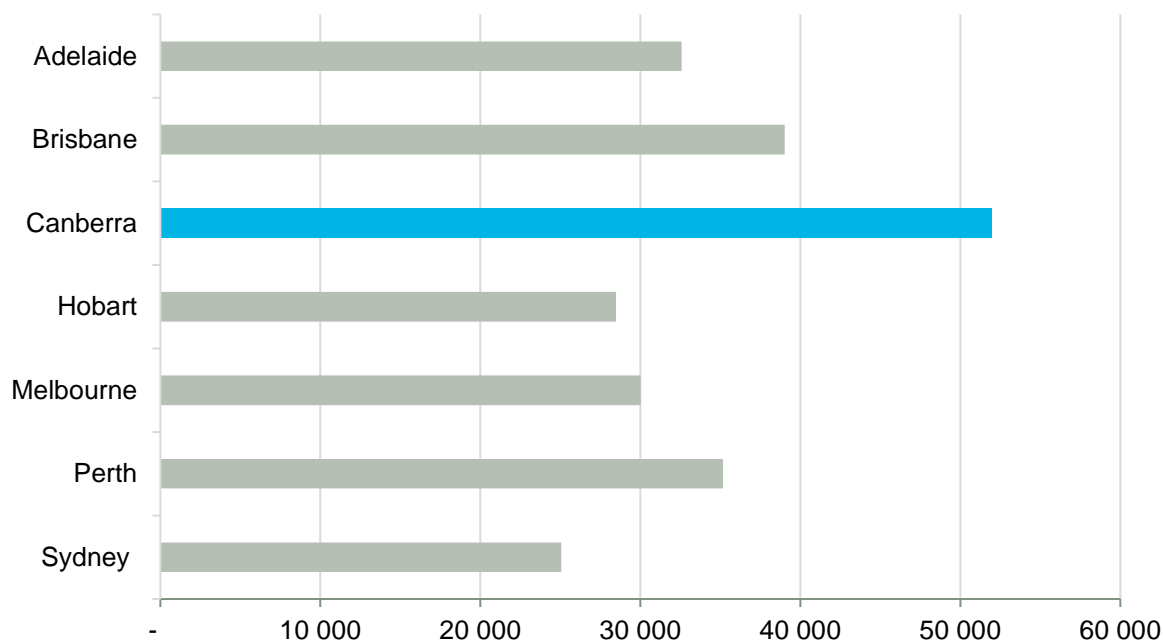
Figure 2-3: Annual water bills in 2016-17 for a residential customer using 200 kL per annum (\$)



Source: Water utility websites.

In contrast, water bills for non-residential customers whose water use is greater than domestic levels are significantly higher in Canberra than in any other capital city in Australia (see Figure 2-4). This is due to the level of the Tier 2 usage price, which accounts for 99 per cent of the water bill for a customer using 10 ML per annum.

Figure 2-4: Annual water bills in 2016-17 for a non-residential customer with a 150mm meter using 10 ML per annum (\$)



Source: Water utility websites.

2.2.4 Trade waste charging

Icon Water does not currently have any specific pricing arrangements in place for liquid trade waste (LTW). Most other Australian cities include an element in their tariffs for LTW. LTW is all liquid waste that is discharged to the sewerage system other than domestic sewage. Examples include waste from industrial producers, discharge from small businesses like health clinics and food preparation businesses. Icon Water has a legislative requirement to manage LTW discharges under the *Utilities Act 2000* and the *Water Supply and Sewerage Service Standards Code 2000*.

Discharge of LTW into the sewerage system can cause additional costs. High volumes can cause sewer overflows, solid substances can cause blockages, corrosive substances can reduce sewerage asset lives, and chemicals can produce gases that result in dangerous working conditions and disruptions to treatment plant processes. In the absence of specific pricing arrangements for LTW, the cost of collecting and treating this waste has been borne by all Icon Water customers.

2.2.5 Capital contributions

Under current infrastructure funding arrangements, developers pay 100 per cent of the cost of any augmentation required to service their development, regardless of the size of augmentation required. These arrangements were intended for greenfield development on our urban fringes, which is the form that urban intensification in the ACT has traditionally taken. However, increasingly, housing development in the ACT's new suburbs is being complemented by urban infill in already-developed suburbs (brownfield development). This expected increase in density will create pressure on existing water and sewerage infrastructure across the capital. In some areas this infrastructure is close to capacity.

The current infrastructure funding arrangements are not suitable for brownfield developments and can result in:

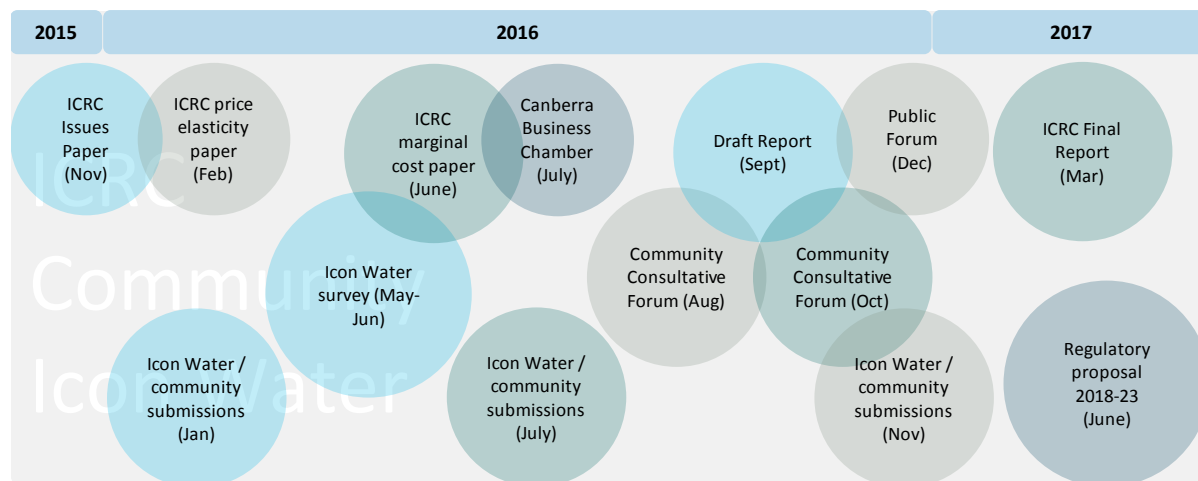
- sub-optimally sized assets
- 'last person standing' issues where a single developer incurs the full cost of augmentation with preceding developers incurring no cost, and subsequent developments benefiting at no cost
- uncertainty over the process causing development delays and protracted negotiations.

3 How we've developed this proposal

3.1 Our process

Tariff structure has been the subject of extensive community debate over the past 18 months. The ICRC has undertaken a separate tariff structure review process (the ICRC Tariff Review 2016), which has established the principles by which it will assess Icon Water's pricing proposal. At the same time, Icon Water has been engaging with the community to gather views on tariff structures through surveys and our Community Consultative Forum. The key steps in these processes are illustrated in Figure 3-1.

Figure 3-1: Icon Water customer engagement and ICRC Tariff Review



Source: Icon Water analysis.

Our tariff proposal has been developed with regard to the findings of the ICRC tariff review and the community views garnered from our customer engagement program. Each of these two considerations is discussed below.

3.2 ICRC requirements

Ultimately, the prices for water and sewerage services in the ACT are set by the ICRC. Icon Water has therefore developed its proposal with regard to the ICRC's guidance on tariff structure. The ICRC final report on its review of tariff structures of March 2017 set out:

- an overarching objective
- a set of pricing principles
- key features of its preferred tariff structures for the 2018–23 regulatory period.

The objective, which mirrors s19L of the *Independent Competition and Regulatory Commission Act 1997* (the ICRC Act), is:

To promote efficient investment in, and efficient operation and use of, regulated services for the long-term interests of consumers in relation to the price, quality, safety, reliability and security of the service.²

The ICRC has indicated that its interpretation of this objective is that ‘the ultimate objective [is] the long-term interests of consumers.’³ It further elaborates that ‘consumer interests must take account of equity and other social impacts as required by the ICRC Act.’

Having regard to this objective, as well as government policy and national agreements, the ICRC set out the following principles for the pricing of water and sewerage services:

- economic efficiency in use
- economic efficiency for investment and operation
- environmental considerations
- community impact – gradual adjustment
- community impact – fair outcomes for low-income households
- regulatory governance – simplicity
- regulatory governance – transparency.

The first two principles recognise the importance of considering the whole-of-community impacts described by economic efficiency. Icon Water’s July 2016 submission to the tariff review and the ICRC’s tariff review draft report highlighted the fact that cost-reflective pricing would result in the best whole-of-community outcome and is therefore an important reference point for community debate about tariff structures.

When price is set to reflect the costs incurred due to an incremental increase in water usage, including all water security and environmental costs, consumers have an incentive to use water they value above social cost and no more. The ICRC estimated the long-run marginal social cost of water usage at up to \$1.74 per kL. The 2017-18 Tier 2 price, at \$5.38 per kL, is around three times greater than marginal social cost. This causes consumers to decide against using water that they value above social cost and, in some cases, leads consumers to make unnecessary investments in alternative supplies that are more costly than supply by Icon Water. The latter behaviour is known as uneconomic bypass (see Box 3-1).

The ICRC’s principles recognise that tariff structure reform needs to consider not only economic efficiency (‘the size of the pie’), but also impacts on individual consumers (‘how the pie is sliced up’). Moving to cost-reflective pricing – with a single usage charge set at marginal cost and a much higher fixed charge – would lead to dramatic bill increases for smaller users.

It is important to note that bill impacts overstate the overall impacts on these households. As owners and customers of the businesses and government institutions that would see bill decreases, households would benefit from improved services and reduced prices or taxes over time. On average, households in Australia would be better off under cost-reflective pricing, but some households may be worse off. Notwithstanding the fact that there appears to be little relationship between income and water use (see Figure 3-2), some of the households that are worse off may be low-income households. In contrast to the objective measure of economic efficiency, comparing the merits of equity outcomes across tariff structure options requires subjective, ethical judgements.

² ICRC, 2017: 16.

³ ICRC, 2017: xv.

Box 3-1: Example of uneconomic bypass and prudent discount

Consider a large customer using 100 ML per annum, where the social cost of providing this water is \$2 per kL (\$200,000 per annum) and the price paid by the customer is \$5 per kL (\$500,000 per annum).

The customer identifies an opportunity to invest in an alternative water source, such as treating water from Lake Burley Griffin, that would cost \$4 per kL. In the absence of any change in Icon Water’s pricing, the customer would adopt the alternative, reducing its own annual water bill from \$500,000 to \$400,000.

Overall, the cost of supplying that 100 ML of water has increased from \$200,000 to \$400,000 per annum. The community bears an additional cost of \$200,000 due to the bypass.

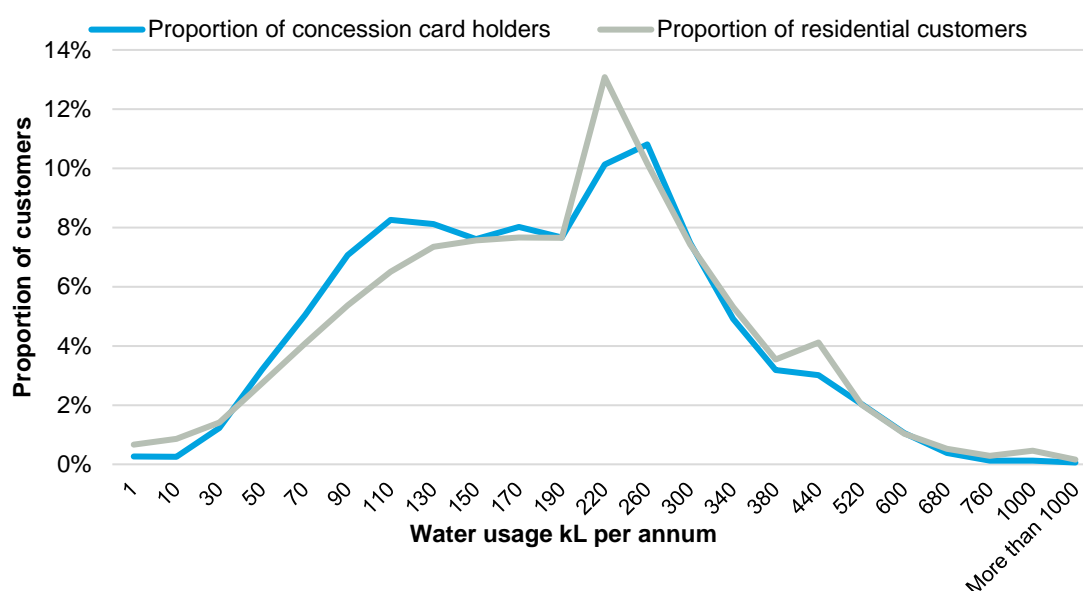
This \$200,000 cost can be decomposed into:

- a \$100,000 gain to the customer adopting the alternative source
- a \$300,000 loss to other consumers, whose prices must increase to cover the contribution to fixed costs previously made by the bypass customer (\$500,000 bill less \$200,000 incremental social cost).

A *prudent discount* is a price discount offered to a customer in order to avoid uneconomic bypass and make all customers better off relative to the bypass alternative. In this example, Icon Water might offer to deliver water to the customer for \$3.50 per kL. If the customer decides to continue utilising the primary water supply network, the community avoids the \$200,000 cost it incurs under the bypass scenario. The impacts relative to the bypass scenario can be decomposed into:

- a \$50,000 gain for the customer with the bypass opportunity (since its bill reduction increases from \$100,000 to \$150,000)
- a \$150,000 gain for other consumers (since they pay \$150,000 funding the prudent discount rather than \$300,000 under the bypass scenario).

Figure 3-2: Water consumption by concession card holders 2013-14



Source: Icon Water.

Taking all of the principles into consideration, the key features of the ICRC’s preferred water tariff structure are set out in Box 3-2.

Box 3-2: ICRC preferred features – water tariff structure

The ICRC's preferred water tariff structure for the 2018–23 regulatory period has the following features:

- Retention of an inclining block tariff structure but with gradual change to reduced reliance on usage charges and higher reliance on the fixed charge calibrated to recover the efficient costs of water supply services provided by Icon Water.
- Consideration of a separate tariff for different customer groups, such as large users, and variation of the fixed charge to limit adverse impacts on low-income households.
- Retention of a relatively low Tier 1 usage charge to help contain costs for low-volume users of water.
- Setting the marginal (Tier 2) usage charge at a mark-up to the long-run marginal cost to reflect the community's strong preference for water conservation while also reducing the high reliance on usage charges for revenue-raising purposes.
- Adjustment of the marginal (Tier 2) usage charge in times of drought to better reflect the scarcity value of water.
- Adjustment of charges where necessary to ensure that large users do not opt out of the water supply services provided by Icon Water.
- Gradual and measured transition in the tariff structure.
- Application of the pricing principles set out in this report as a guide in changing the tariff structure and setting any new tariffs.

Source: ICRC (2017).

The ICRC considers that the current sewerage tariff structure should be retained and welcomes the introduction of a trade waste pricing regime.

The Commission's final position, consistent with what was presented in the draft report, is that, particularly in the absence of a reliable measure of actual discharge volumes, it is unlikely that any potential economic efficiency benefits of introducing a sewage volume charge would outweigh the costs. The Commission therefore considers that the current tariff structure should be retained.⁴

3.3 What the community has told us

To supplement the community feedback received from submissions to the ICRC tariff review and views expressed at the public forum held by the ICRC, Icon Water actively sought feedback through its Talking Icon Water community engagement program. The four main sources of feedback through the program were:

- a survey of 607 customers on tariff structure issues
- Icon Water's Community Consultative Forum
- direct consultation with trade waste customers
- direct consultation with developers and other stakeholders affected by capital contributions.

⁴ ICRC, 2017: xxi.

3.3.1 Survey feedback

As part of its Talking Icon Water community engagement program, Icon Water ran an online survey on water tariff structure issues during May and June 2016. Some 470 residential customers completed the questionnaire, with a further 137 partially completing the questionnaire. Residential customers represent around 94 per cent of our demand by

“Tier 2 is a good way to discourage extra use of a limited natural resource.”

“I have a garden and don't believe I should pay a premium to maintain it.”

customer numbers and around three quarters of our demand by water volume. The main survey results relating to tariff structure were published in Icon Water's July 2016 submission to the ICRC and can be summarised as follows.⁵

Around half of respondents were in favour of a move from the current two-tier usage price to a single usage price, in principle.

However, support was much lower once the potential bill impacts of this change were considered.

Similarly, around half of respondents were in favour of a reweighting from usage charges to fixed charges, in principle. Again, support was much lower once the potential bill impacts of the change were considered.

“Usage charges are the only fair charges.”

“I prefer charging that is less reliant on usage charges as it provides more predictability for budgeting.”

A majority of respondents were in favour of differentiating prices between residential and non-residential customers. Around one quarter of the group identified concern over the applicability of the tiered usage charge to non-residential customers. Around two thirds of the group wanted non-residential customers to pay a higher fixed charge.

After taking bill impacts into consideration, a majority of customers indicated that reducing the usage charge to \$2.60 per kL and increasing the fixed charge to \$380 per annum would be unsuitable for the ACT. Around half of respondents considered suitable an option

“Commercial users should pay higher prices. Individual families already pay too much for day to day living.”

“Residential and non-residential customers are all members of the community and it is fair that they pay the same rate for water.”

in which the Tier 2 price would be reduced to \$3.90 per kL, with the fixed charge increased to \$240 per annum.

Regardless of the tariff option, a majority of respondents preferred the length of transition period to the new structure to be five years or less.

3.3.2 Community Consultative Forum

Icon Water established the Community Consultative Forum on 9 June 2016 to allow the community to speak directly about what they value and to help shape future planning by Icon Water. The 13 external members of the Community Consultative Forum are intended to be representative of the ACT community. The Community Consultative Forum discussed tariff structure issues in depth at its meetings on 11 August 2016, 26 October 2016 and 2 February 2017. The presentations and minutes from these meetings are available on the Icon Water website.⁶ The forum members held a range of

⁵ Icon Water, 2016: 1-20.

⁶ See www.iconwater.com.au.

views on most aspects of tariff structure reform. The following views appeared to have broad support within the group:

- The ICRC Draft Report option of marginal cost pricing would be unfair on residential customers and send the wrong signals about water security and the environment.
- The two-tier water usage charge should be retained for residential customers for equity and water conservation reasons.
- Prices should be differentiated between residential and non-residential customers and potentially other types of customers.
- Large user price decreases should not be at the expense of small users.

Members of the forum representing business customers expressed concern about the cost of water to large users.

3.3.3 ACT Government

The ACT Government submission to the ICRC in November 2016 strenuously opposed the marginal cost pricing option. It gave a range of reasons for this view and indicated a preference for '*a transitional period to implement a measured reduction in the volumetric tariffs and a gradual increase in the fixed charge.*'⁷

3.3.4 Trade waste customers

Icon Water has been undertaking preliminary consultation on potential trade waste charging regimes to better understand:

- the customer impacts of implementing a new charging system
- barriers customers may face in responding to new arrangements
- ways in which a new system can be designed and implemented to minimise such barriers.

The consultation included a public forum, a telephone survey with 200 respondents and an online survey with 26 respondents, all three conducted in December 2016.

The key findings from the consultation were as follows.

- Levels of understanding of trade waste and the role of trade waste agreements and pre-treatment requirements in the business community is quite low.
- There was general agreement that a charging system would lead to better practices in managing LTW.
- A number of potential compliance barriers were identified including upfront costs of installing treatment mechanisms, site design limitations and a lack of belief that pre-treatment is necessary.
- A transition period to allow installation of pre-treatment mechanisms prior to charges being applied would be welcome.
- There was strong support for compliant customers paying less than those who do not comply.

3.3.5 Capital contributions stakeholders

Icon Water has proposed a new capital contributions scheme which will provide a fairer way of funding water and sewerage infrastructure upgrades that are triggered by brownfield developments

⁷ ACT Government, 2016: 9.

(see section 4.2.2 for more detail). The proposed scheme is currently being considered by the ICRC as an industry code under the *Utilities Act 2000*. For more information, see Icon Water's capital contributions code pack which is available on the ICRC's website.⁸

The proposed scheme was informed by extensive consultation over a three-month period from December 2016 to March 2017. Icon Water consulted with a range of stakeholders including property developers, peak industry bodies, development consultants and professionals, the ACT Government, community organisations, the Community Consultation Forum and customers.

Consultation included:

- 11 face to face meetings with key industry stakeholders
- two discussion forums with members of three industry bodies (Housing Industry Association, Master Builders' Association, and the Property Council)
- 14 online submissions received through our website
- discussions with our Community Consultation Forum
- a telephone survey of 1,020 Canberra residents.

The results show:

- Broad agreement that the current infrastructure funding arrangements are not working well.
- A general preference for a single Canberra-wide precinct charge rather than multiple separate precinct charges.
- Developers would prefer all costs to be recovered through general tariffs.
- The general public supported a capital contributions scheme.
- A general preference for a longer transition period.
- Some concerns about the application of use of equivalent population as the basis for applying the precinct charge.

3.3.6 Summary of community views

The consultation undertaken by Icon Water has identified a range of community views. Generally, stakeholders are focussed on water conservation and the immediate bill impacts for specific groups, rather than the overall impact on those groups and the community over time. In particular, there was opposition from residential customers and the ACT Government to any tariff structure rebalancing that would result in material bill increases for residential customers.

Residential customers' perceptions of fairness seem to be based on *changes* in the sharing of costs rather than the sharing outcome itself. Larger users are seen as less deserving of a bill decrease than other customers. As a result, rebalancing by taking from small users and giving to large users is seen as unfair.

As a result of the above views, there is support for retaining the existing tariff structure, at least for residential customers. There was support from all types of customers for introducing separate tariffs for residential and non-residential customers. While there are valid concerns about the applicability of the inclining block tariff to non-residential users, in most cases this preference appeared to be driven by the expected impacts on the participant's own bill.

⁸ See icrc.act.gov.au.

3.4 Our approach

Having regard to the ICRC requirements and community feedback outlined above, our approach to developing a tariff reform proposal is to:

- retain the current inclining block water usage charge
- rebalance the water tariff by increasing the fixed charge and reducing the Tier 2 usage charge to the extent possible without causing real increases in combined water and sewerage bills for typical residential customers (in other words, fund reductions in the Tier 2 usage price through cost savings across both the water and sewerage business segments)
- introduce flexibility to negotiate pricing agreements with large customers that can demonstrate a credible opportunity for uneconomic bypass
- retain the current sewerage price structure
- delay introduction of a trade waste pricing regime until later in the 2018–23 period, to ensure adequate more time for consultation.

We considered the potential for separate water tariffs for different customer groups, since this was supported by both the ICRC and the community. After undertaking detailed analysis, we decided against proposing separate tariffs because all of the options developed resulted in one or more of the following:

- substantial bill increases for residential customers
- substantial bill increases for small non-residential customers
- a concentration of benefits on a very small number of large customers.

Our proposal does not include consideration of any further rebalancing of the tariff structure beyond 2023. The marginal social cost of water usage will vary over time with operating costs and the level of water security. Our preference is that the merits of any further rebalancing be considered at the time of the 2023 price review in light of cost estimates and community views at that time.

4 Our proposed tariffs

4.1 Standard water and sewerage tariffs

4.1.1 Water tariff

Icon Water proposes adopting a measured and gradual approach to water tariff reform. The key elements of the proposal for the 2018–23 regulatory period are:

- reducing the Tier 2 usage price to \$4.95 per kL in 2018–19 and keeping it constant in nominal terms in each of the remaining years of the 2018–23 regulatory period
- increasing the annual water supply charge by \$20 each year to \$200 by 2022–23
- flexibility to negotiate pricing agreements with large customers that can demonstrate a credible opportunity for uneconomic bypass.

Our proposed price path for the 2018–23 regulatory period is set out in Table 4-1 for each water tariff component. The supply charge and Tier 2 price would be set in nominal terms as shown in the table. The Tier 1 usage price will depend on CPI, cost pass-through adjustments, and, from 2020–21, any adjustments for unders and overs, subject to a side constraint. The method for calculating the Tier 1 usage price is provided in the annual pricing model at appendix 2 of [Attachment 2: Form of regulation](#). These forecasts assume inflation of 2.5 per cent and do not account for any cost pass-through or unders and overs adjustments.

Table 4-1: Forecast water tariffs

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Supply charge (\$/annum)	104.21	120	140	160	180	200
Tier 1 for usage 0-0.548 kL/day (\$/kL)	2.68	2.73	2.76	2.79	2.81	2.84
Tier 2 for usage >0.548 kL/day (\$/kL)	5.38	4.95	4.95	4.95	4.95	4.95

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

The rebalancing of the tariff structure under these forecast tariffs is illustrated in Figure 4-1. It shows that the proportion of revenue derived from usage charges (under a constant demand assumption) is expected to fall from 89 per cent to 81 per cent over five years.

Figure 4-2 shows that our proposal would move the water tariff structure towards that of other major water utilities in Australia.

Figure 4-3 illustrates the fact that our proposed rebalancing is minor compared to the shift towards usage charges that took place between 2004 and 2013.

The proposed arrangements for negotiating pricing agreements with large customers are detailed in section 4.3 of [Attachment 2: Form of regulation](#).

Figure 4-1: Gradual rebalancing of the water tariff

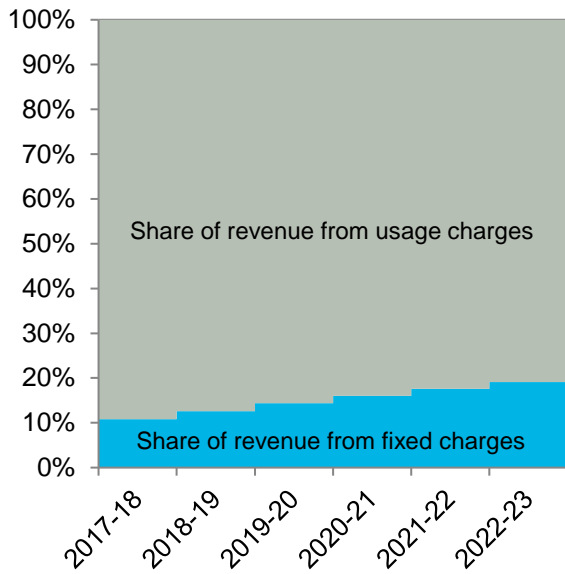


Figure 4-2: Proposed rebalancing of water tariff in industry context

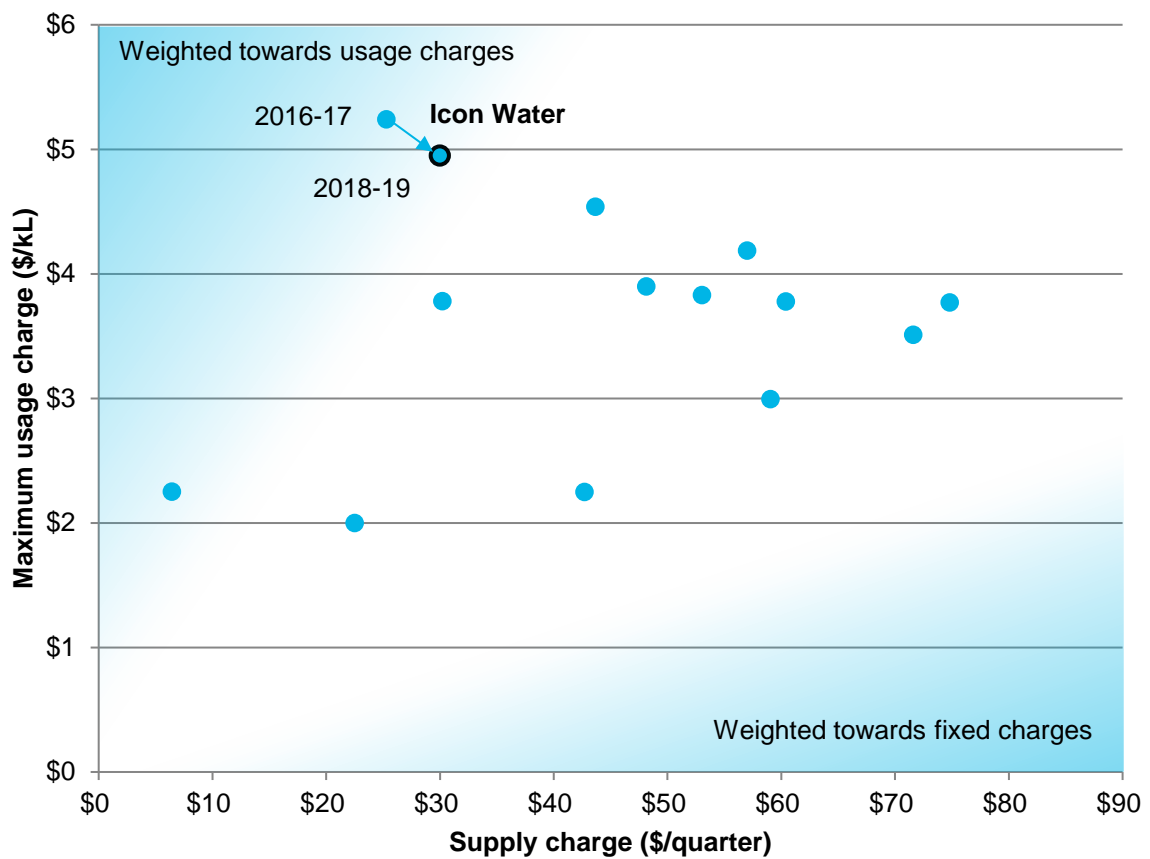
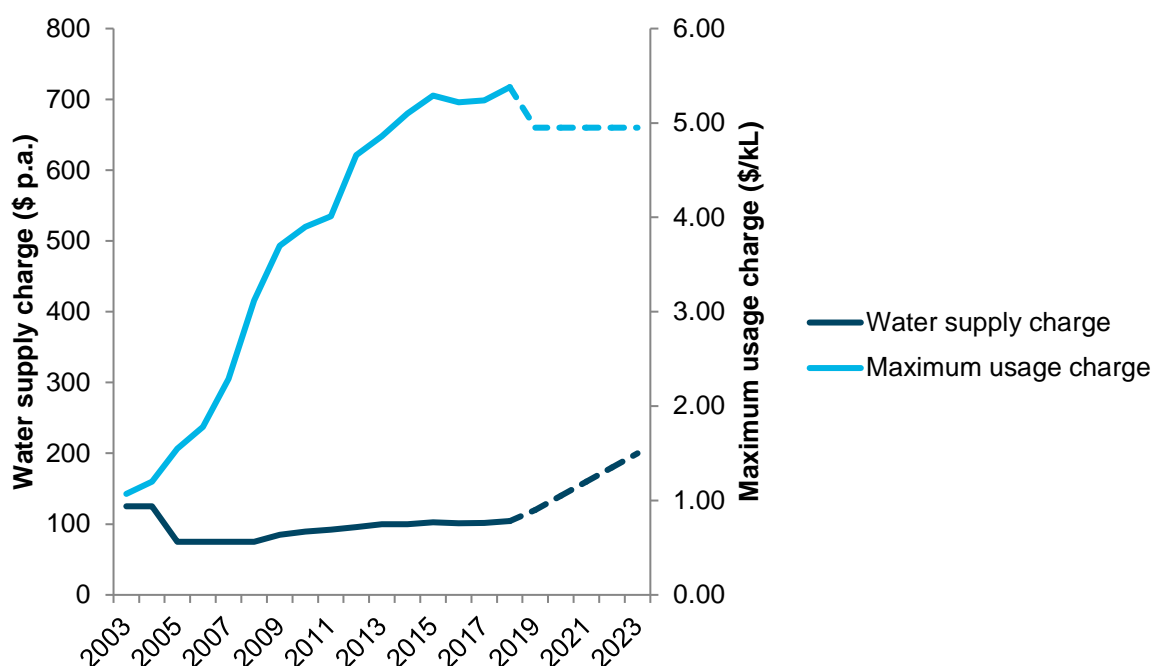


Figure 4-3: Proposed rebalancing of water tariff in historical context (\$, nominal)



4.1.2 Sewerage tariff

Icon Water proposes to retain the current tariff structure, except for trade waste customers (discussed below). Our proposed price path for the 2018–23 regulatory period is set out in Table 4-2 for each sewerage tariff component. The precise method for calculating annual prices, including and cost pass-through adjustments, is set out at Appendix 2 of [Attachment 2: Form of regulation](#). These forecasts assume an inflation rate of 2.5 per cent and do not account for any cost pass-through or unders and overs adjustments.

Table 4-2: Forecast sewerage services tariffs

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Supply charge (\$/annum)	537.34	541.84	546.39	550.97	555.59	560.24
Charge for flushing fixtures in excess of two (\$/annum)	525.51	529.92	534.36	538.84	543.35	547.91

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

4.1.3 Liquid trade waste charges

The first stage of community consultation on a potential LTW charging regime was completed in early January 2017. However, due to more pertinent consultation activities related to the ICRC 2016 tariff review and the introduction of water and sewerage capital contributions from 1 July 2017, Icon Water decided to postpone subsequent rounds of public consultation in order to avoid consultation fatigue that may impact on the quality of community response on the aforementioned issues.

Icon Water intends to undertake further rounds of community consultation regarding the development of a LTW policy and charging regime during the course of the 2018–23 regulatory period. This will enable Icon Water to engage its LTW customers and develop a policy and user-pays system that is acceptable to stakeholders.

Icon Water intends to introduce a new LTW management system during the 2018–23 regulatory period, which may require LTW customers to manage their waste before it is discharged into the sewerage network. A LTW charging regime will be introduced under the management system. While the structure of the charging regime has not been finalised, the charges will be set to recover the incremental costs associated with accepting and treating commercial waste through the sewerage system (with charges to all other customers reduced as necessary to maintain compliance with price controls). The intent of the policy and charging regime being developed by Icon Water would be to signal these costs and provide an incentive for LTW customers to undertake pre-treatment where it would reduce overall costs. To date the cost of collecting and treating LTW has been borne by the broader ACT community, rather than being directly recovered from LTW customers.

The introduction of LTW charges will occur once the community consultation process is sufficiently advanced to allow the finalisation of the policy and charging regime. Icon Water proposes that the charging regime for liquid trade waste be introduced as a set of new miscellaneous charges as part of the annual price adjustment process defined in the price direction. The forecast miscellaneous revenue from LTW charges will be deducted from prices for sewerage services via a pass through adjustment.

Icon Water is of the view that effective engagement with affected customers is crucial to developing the timing and details of a charging regime for liquid trade waste and ensuring sufficient time is allowed to complete a comprehensive education program prior to implementing the new policy. This transitional period will encourage LTW customers to make the necessary operational changes to find the least-cost means of disposing of trade waste prior to the introduction of the policy and charging regime. For some customers, these changes will involve installation or upgrading pre-treatment devices and, for others, it will require improved management practices.

4.1.4 Bill impacts

The impacts of these forecast tariffs on the bills of various types of customer are set out in Table 4-3 and Table 4-4, assuming CPI growth of 2.5 per cent per annum.⁹ Under our proposed price path:

- no customer will see combined bill increases materially higher than the rate of inflation
- average residential users will see bill increases slightly below the rate of inflation
- large water users will see bill decreases in 2018-19, with increases below the rate of inflation thereafter.

⁹ For a more detailed assessment of bill impacts across the distribution of customers see [Attachment 11: Revenue requirement and price path](#).

Table 4-3: Forecast residential bill impacts

	2018-19	2019-20	2020-21	2021-22	2022-23
Residential customer using 100 kL per annum					
Combined water and sewerage bill (\$ per annum)	935	962	990	1,017	1,044
Change in bill (\$)	26	27	27	27	27
Change in bill (%)	2.8	2.9	2.8	2.8	2.7
Residential customer using 200 kL per annum					
Combined water and sewerage bill (\$ per annum)	1,227	1,257	1,286	1,316	1,346
Change in bill (\$)	27	29	30	30	30
Change in bill (%)	2.3	2.4	2.4	2.3	2.3
Residential customer using 300 kL per annum					
Combined water and sewerage bill (\$ per annum)	1,704	1,733	1,763	1,793	1,823
Change in bill (\$)	-12	30	30	30	30
Change in bill (%)	-0.7	1.7	1.7	1.7	1.7

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

Table 4-4: Forecast non-residential bill impacts

	2018-19	2019-20	2020-21	2021-22	2022-23
Non-residential customer using 1000 kL per annum, with 10 fixtures charged					
Combined water and sewerage bill (\$ per annum)	9,926	9,996	10,066	10,136	10,207
Change in bill (\$)	-269	74	75	75	76
Change in bill (%)	-2.5	0.7	0.7	0.7	0.7
Non-residential customer using 7000 kL per annum, with 10 fixtures charged					
Combined water and sewerage bill (\$ per annum)	39,626	39,696	39,766	39,836	39,907
Change in bill (\$)	-2,849	74	75	75	76
Change in bill (%)	-6.6	0.2	0.2	0.2	0.2
Non-residential customer using 7000 kL per annum, with 100 fixtures charged					
Combined water and sewerage bill (\$ per annum)	87,318	87,788	88,261	88,738	89,219
Change in bill (\$)	-2 452	474	478	482	485
Change in bill (%)	-2.7	0.5	0.5	0.5	0.5

Note: Nominal dollar terms, assuming 2.5 per cent forecast inflation.

4.1.5 Assessment against ICRC preferred direction for change

Our water tariff proposal is consistent with the preferred features outlined by the ICRC in its 2016 Tariff Review Final Report. An assessment of our proposal against those features is set out in Table 4-5.

Our proposal to retain the current sewerage tariff structure is also consistent with the ICRC's position. Icon Water agrees that, in the absence of a reliable measure of discharge volumes, it is unlikely that any potential economic efficiency benefits of introducing a sewage volume charge would outweigh the costs.

Table 4-5: Assessment against ICRC preferred features

ICRC feature		Our proposal
Retention of an inclining block tariff structure but with gradual change to reduced reliance on usage charges and higher reliance on the fixed charge calibrated to recover the efficient costs of water supply services provided by Icon Water.	✓	<p>Our proposal:</p> <ul style="list-style-type: none"> retains the inclining block water tariff structure involves a gradual and measured rebalancing, with the Tier 2 water usage charge reduced to \$4.95 in 2018-19 and held constant in nominal terms in subsequent years and the annual water fixed charge increased by around \$20 each year is calibrated to recover our forecast efficient costs
Consideration of a separate tariff for different customer groups, such as large users, and variation of the fixed charge to limit adverse impacts on low-income households.	–	<p>Icon Water considered several options for introducing a separate tariff for non-residential or large customers. We decided against proposing separate tariffs because all of the options developed resulted in one or more of the following:</p> <ul style="list-style-type: none"> substantial bill increases for residential customers substantial bill increases for small non-residential customers a concentration of benefits on a very small number of large customers.
Retention of a relatively low Tier 1 usage charge to help contain costs for low-volume users of water.	✓	Our proposal involves reducing the Tier 1 usage charge by around 1.5 per cent in real terms each year, before any pass-through adjustments.
Setting the marginal (Tier 2) usage charge at a mark-up to the long-run marginal cost to reflect the community's strong preference for water conservation while also reducing the high reliance on usage charges for revenue-raising purposes.	✓	Our proposal involves a reduction in the Tier 2 usage price to \$4.95 per kL. This price remains well above the estimated long-run marginal cost of \$1.74 per kL.
Adjustment of the marginal (Tier 2) usage charge in times of drought to better reflect the scarcity value of water.	–	We continue to support the use of a revenue-neutral drought-pricing scheme that would see water usage prices increase when water restrictions are in place. Given the extremely low likelihood of water restrictions being required in the 2018–23 period, we have not detailed a formal proposal in this submission.
Adjustment of charges where necessary to ensure that large users do not opt out of the water supply services provided by Icon Water.	✓	Our proposed form of price control would allow flexibility to negotiate pricing agreements with large customers in specific circumstances, subject to ICRC approval.
Gradual and measured transition in the tariff structure.	✓	Our proposed tariff structure changes have been designed to ensure no customer will see bill increases materially higher than the rate of inflation.
Application of the pricing principles set out in this report as a guide in changing the tariff structure and setting any new tariffs.	✓	Our proposal satisfies the ICRC pricing principles for the same reasons set out in table 5.1 of the ICRC's Tariff Review Final Report.

4.1.6 How we've responded to community feedback

Our tariff proposal has been shaped to a large degree by community feedback. The extent to which we have listened and responded to the community is highlighted by the way we have adapted our approach following our submission to the ICRC tariff review in July 2016. In that submission we stated:

We intend to engage with customers on specific tariff options ahead of our next submission... The proposed direction for tariff structure reform that we will take to those discussions is... working towards a single usage price that applies to all water use and is significantly lower than the current Tier 2 price of \$5.24 per kilolitre.¹⁰

In the engagement that followed, most participants indicated a desire to retain the existing inclining block tariff for residential customers and that reductions in the Tier 2 price should not come at the expense of increased bills for lower-volume residential customers. In response, we have ensured that our proposal:

- keeps residential customer bills approximately constant in real terms, with the revenue reduction due to reducing the Tier 2 price absorbed by Icon Water through cost savings
- retains the existing inclining-block water tariff structure
- was developed by considering of a number of options involving the introduction of a non-residential or large-user tariff with lower usage charges and higher fixed charges – none of which has been proposed in order to limit impacts on residential and small non-residential customers.

We have also adapted the transition periods and timing of our proposed capital contributions scheme and liquid trade waste charging regime in order to address key stakeholder concerns raised as part of our consultation process.

4.2 Other regulated charges

4.2.1 Current miscellaneous service charges

Icon Water currently provides a number of regulated miscellaneous water and sewerage services, including:

- special meter readings
- testing of water meters
- the provision of rate certificates
- tapping into water mains
- installation of fire hydrants
- disconnection
- installation and removal of stop valve locking cover
- meter relocation.

Icon Water proposes to continue to increase miscellaneous charges by CPI annually in the 2018–23 regulatory period.

¹⁰ Icon Water, 2016: 3.

4.2.2 Capital contributions scheme

Icon Water's proposed capital contributions scheme will provide a fairer way of funding water and sewerage infrastructure upgrades that are triggered by brownfield developments (see Box 4-1). The new scheme is intended to fund 50 per cent of eight brownfield development water and sewerage augmentation projects that will be required over the next 20 years.

Box 4-1: Proposed brownfield scheme

Developers will contribute 50 per cent of the cost of Class 2 assets required to develop brownfield areas, the remainder being recovered from general tariffs.

Over a 20-year forward horizon, this translates to a precinct charge of \$1,200 that applies across Canberra. The precinct charge is applied on the basis of the net increase in equivalent population resulting from the specific development.

Developments that have exchanged contracts on properties prior to the 'go live' date will have an 'opt-in' period until 1 July 2019 to the scheme, based on the date of ACT Development Application lodgement. Developments that have exchanged contracts on properties on or after the 'go live' date will fall under the new scheme.

Developer contributions are not a new impost. Under existing arrangements, developers fund 100 per cent on any augmentation of Class 2 assets triggered by their development.

Forecast revenue from the contributions will be offset against Icon Water's allowable revenue for the purpose of setting water and sewerage tariffs.

Class 1 Headwork Assets	Class 2 Shared Assets	Class 3 Reticulation
		
Those assets that service a broad customer base and cannot be tied to a particular development or area.	Assets that service a suburb or group of suburbs however are impacted by developments.	Small assets, typically at a street level that relate to connections to houses that are part of a development.
Developer pays 0%	Developer pays 50%	Developer pays 100%

In its submission to the annual price adjustment process for 2017–18, Icon Water proposed that the capital contribution scheme be treated as a new miscellaneous service under the current price direction, and that charges that would apply under the proposed scheme be treated as miscellaneous charges. In its 2017–18 decision, the ICRC indicated that it will consider Icon Water's application in due course as part of its determination of the proposed water and sewerage capital contribution code.

The annual review of capital contribution charges would differ from the CPI adjustment that applies to the current set of miscellaneous fees and charges. The proposed annual capital contribution charge adjustment process is set out in the information paper accompanying the draft Water and Sewerage Capital Contributions Code.¹¹ The charge is based on a financial model that relies on 20-year forecasts of ACT population growth and capital expenditure (capex) required to augment the water and sewerage network to service this growth. Icon Water is proposing that the model be updated annually to reflect updates to ACT Government population projections and the associated capital expenditure plan. The revised model and associated charges (along with any proposed changes to precinct boundaries) would be submitted to the ICRC annually as part of the annual price reset process described in [Attachment 2: Form of regulation](#).

¹¹ Icon Water, 2017: 54.

Abbreviations and acronyms

ACT	Australian Capital Territory
CCF	Community Consultative Forum
CPI	Consumer Price Index
ICRC	Independent Competition and Regulatory Commission
kL	kilolitre (one thousand litres)
LTW	liquid trade waste
ML	megalitre (one thousand kilolitres)

References

ACT Government (2016). Submission to the Independent Competition and Regulatory Commission's Water and Sewerage Tariff Review. Canberra, ACT Government.

Icon Water (2016). Submission No 9 to the Tariff Review 2016. Canberra.

Icon Water (2017). Water and sewerage capital contributions Information paper (Attachment A). Canberra.

ICRC (2017). Final report: Tariff Structure Review 2016–17 - Regulated water and sewerage services. Canberra, Independent Competition and Regulatory Commission.