

PRICE PROPOSAL

2018–23 Water and Sewerage Price Proposal Overview



Quality
drinking water



Reliable
supply



Affordable
pricing



Customer
service



Environmental
sustainability

Safe, reliable and quality customer service, with fair and affordable pricing

Our main challenges

Ageing infrastructure

New focus on urban infill

Higher energy costs

Avoiding continued
revenue shortfalls

Reforming our inefficient
water tariff

Meeting these challenges

Identify customer priorities
and preferences

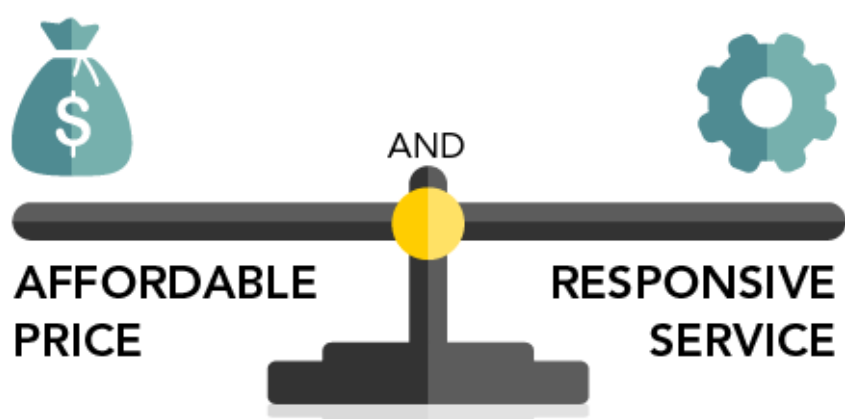
Plan activities to deliver
outcomes customers want

Innovate and reduce costs

Realistic demand forecasts

Measured and gradual
water tariff reform

Outcome



Typical residential customer
combined water & sewerage bill
rising at or below forecast inflation
for each year from 2018–19

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Our key price proposal outcomes



Reliable
supply

Network reliability Page 13

Reduce expenditure on water mains
renewals in response to customer feedback
Maintain the current level of sewage overflows



Quality
drinking
water

Water quality Page 13

Maintain current high water quality
standards



Affordable
pricing

Fair and affordable pricing Page 33

Annual increases at or below forecast inflation
for the typical residential customer
Measured rebalancing of fixed and usage
water charges



Customer
service

Customer service Page 13 & 19

Improved customer engagement
A more seamless customer interface



Environmental
sustainability

Environmental sustainability Page 21

Continue to meet environmental flow
requirements
Renewable energy program
Reduce our waste to landfill
Retention of two-tier water tariff to limit
water use



Operational efficiencies Page 24

10 per cent real reduction in operating
costs by 2022–23
Better integration between operating and
capital expenditure through improved
asset management

Message from our Board

We are pleased to present our five-year water and sewerage price proposal for the 2018–23 regulatory period to the ACT community. The ACT's economic regulator, the Independent Competition and Regulatory Commission (ICRC) will review and consult on our proposal before setting water and sewerage prices to apply from 1 July 2018.

Our vision for Icon Water is to be the premier, most trusted water utility. This can only be achieved by understanding our customers' needs and then managing and operating the water and sewerage network efficiently to meet customer requirements.

The key outcome of our price proposal is safe, reliable and quality customer service with fair and affordable pricing; the measured and gradual rebalancing of our water tariff would see the combined water and sewerage bill of a typical residential customer rise at or below the rate of forecast inflation for each year from 2018–19 while maintaining our service performance.

Customer engagement over the past 18 months has been at the heart of developing our price proposal. We have discussed a wide range of issues from customer priorities to tariff reform. The feedback we received proved invaluable in shaping our final positions.

In proposing a price path in line with inflation, we have overcome several



Ms Wendy Caird

Chair

factors with the potential to place upward pressure on prices. This includes dealing with water sales forecasts being set too high at the 2015 Industry Panel review resulting in water prices that were too low for us to recover our allowed revenue. We are also facing the prospect of some costs outside of our control rising over the 2018–23 regulatory period, such as electricity prices.

We have met these challenges by putting substantial effort into further improving our asset management and business practices to find significant ongoing efficiencies in our operating and maintenance costs. We are also proposing a sensible, rigorously assessed capital expenditure program for the five-year period that focusses on renewing critical infrastructure to allow us to continue to meet our service standards.

We are confident that our price proposal, summarised in this overview document, will enable us to continue to provide safe, reliable and value-for-money services to the ACT community into the future.

We look forward to working with the ICRC on its review and encourage our customers and other stakeholders to participate in the ICRC's consultation process. We believe that our proposed prices fulfil the ICRC's objectives as set out in the *Independent Competition and Regulatory Commission Act 1997*, as explained in [Attachment 13: Consistency with ICRC objectives](#).



Mr John Knox

Managing Director

30 June 2017

Presenting our price proposal

Icon Water's five-year 2018–23 price proposal comprises an overview document and 13 detailed attachments that cover the various elements that make up our regulatory price proposal.

The proposal is accessible to the Australian Capital Territory (ACT) community with a customer-focused website.

Our pricing website

A user-friendly and customer-focused website (ourpricing.iconwater.com.au) provides an interactive way for our customers to explore the key parts of our proposal.

The website also provides links to the [overview](#) document and the [attachments](#).

Detailed attachments

More detailed information on key elements of Icon Water's proposal is set out in 13 attachments (and two models).

The attachments provide the information required to enable full scrutiny by the economic regulator in order to determine prices for 2018–23.

Overview of our price proposal

This document provides a concise and accessible summary of our entire 2018 price proposal.

2018 price review timeline



Introduction

Background

Icon Water is the ACT's supplier of water and sewerage services and supplies bulk water to Queanbeyan.

We own and operate the ACT's network of dams, water treatment plants, sewage treatment plants, reservoirs, water and sewage pumping stations, mains and other related infrastructure. We consistently deliver safe drinking water and reliable sewerage services to a community of over 393,000 people.

As a monopoly provider of essential services, the prices we can charge are set by the ACT's economic regulator, the Independent Competition and Regulatory Commission (ICRC). The review process involves a comprehensive examination of our proposal to ensure that safe, reliable services will continue to be provided at efficient cost in the long-term interests of customers.

Prices are generally reviewed every five years. The ICRC has started its review of prices that will apply from 1 July 2018 to

Overview

This document provides a synopsis of our 2018–23 price proposal.

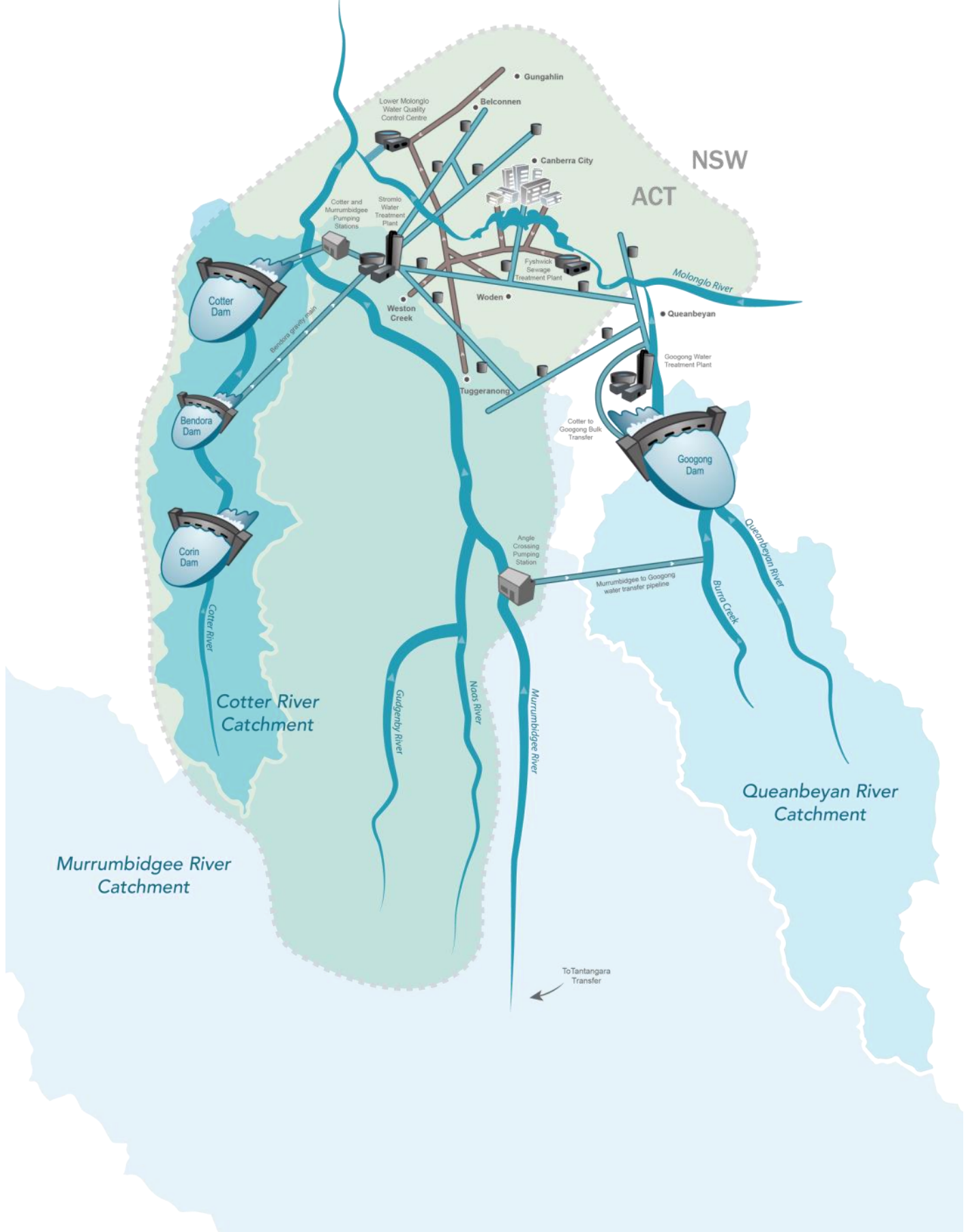
30 June 2023. While we plan for the long-term, as part of the 2018 price review we have developed a five-year price proposal, in consultation with our customers.

The 2018–23 water and sewerage price proposal sets out Icon Water's proposed service levels, operating expenditure (opex) and capital expenditure (capex) programs along with expected prudent and efficient costs, and how Icon Water proposes to recover these costs from its customers.

This overview document presents a concise and accessible synopsis of our 2018 price proposal with further detail contained in relevant attachments.



Our water and sewerage network



Corporate vision

Our vision is to become the premier, most trusted water utility. This will be achieved through four strategic objectives:

- meet customer needs and exceed customer expectations
- protect, engage and develop our people
- maximise value to customers by balancing cost, risk and performance
- deliver sustainable financial returns and gearing.

Continuing to provide safe, reliable, and value-for-money water and sewerage services to customers is at the heart of our 2018 price proposal. In developing the proposal:

- customers have been consulted to better understand their needs and expectations
- steps have been taken to ensure value for money by minimising costs without compromising service performance
- a path to deliver financial sustainability for the business and a fair return for the shareholders has been set
- allowance has been made for a proficient, confident and highly connected workforce, essential to delivering the plan.



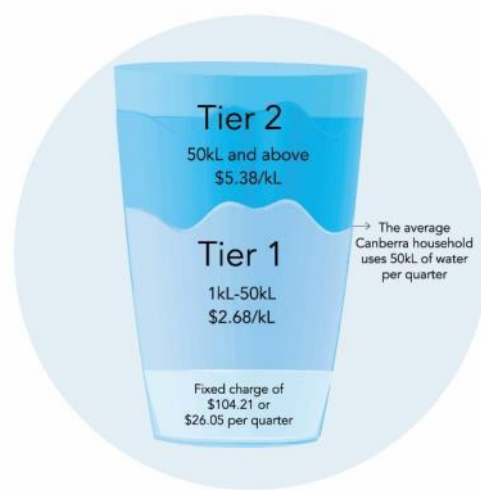
Our current tariffs and prices

Our water tariff is a two-part inclining block structure that comprises:

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

Our sewerage tariff structure comprises:

- a fixed supply charge of \$537.34 per year, plus
- for commercial customers and common properties, a charge on every additional flushing fixture (toilet) greater than two of \$525.51 per year.



Regulatory framework and approach

Our prices are currently regulated by the ICRC under the [Substituted Price Direction](#) that was put in place by the Industry Panel in April 2015. The Industry Panel's regulatory framework comprises:

- a five-year regulatory period
- a post-tax cost building-block approach to determining the revenue we can recover from customers
- a hybrid price and revenue cap form of price control with individual price caps for water and sewerage services:
 - five-year price path based on forecast demand with no annual reforecasting
 - annual price adjustment process for changes in the consumer price index and eligible pass-through events
 - a demand volatility adjustment mechanism for water volumetric revenue under/over-recoveries outside a six per cent band to be recovered/repaid in the next regulatory period
- pass-through arrangements for the Water Abstraction Charge, Utilities Network Facilities Tax, subvention payment, service standard, regulatory and tax change events.

The ICRC published an [issues paper](#) for the 2018 price review in March 2017, setting out its intended regulatory approach for the 2018–23 period. The ICRC indicated that it proposes to continue to apply the Industry Panel's regulatory model where it is working well, but will consider whether improvements can be made.

Guided by the ICRC's intentions, the regulatory model underpinning Icon Water's five-year price proposal largely reflects the Industry Panel's approach, with the exception of a few matters that we think can be improved. See the section on [Our proposed regulatory framework](#).



Context and key challenges

While Icon Water is facing a relatively stable operating environment over the next five years, there are a number of challenges that need to be overcome in order for us to be able to maintain a reliable and quality service at affordable prices.

Context

More water secure

The ACT now enjoys good water security following our substantial investments in water security projects. The enlarged Cotter Dam has increased the ACT's combined water storage capacity by more than a third from 206 to 278 gigalitres (GL). In June 2017 Canberra's expanded water storages are currently about 85 per cent full.

Supply and demand balance modelling shows that, if the Millennium Drought happened again now, water storage levels would not fall below 50 per cent and, based on current trigger levels, temporary water restrictions would not be imposed.

This suggests that we are in a good position to supply the water volumes demanded by our customers over the next regulatory period.

Water restrictions

There is only a remote probability that water restrictions will be required in the 2018–23 period.

A business transformed

Following a comprehensive business transformation process, we are now better placed to provide value-for-money services to our customers.

The transformation started with a corporate restructure in 2012 that transferred the water and sewerage network operation and maintenance activities in-house, while retaining the economies of scale from sharing administration overheads with ActewAGL.

The second phase involved the development of a new corporate vision and strategic objectives along with a new organisational structure. These changes reflect our core focus on the provision of water and sewerage services and give greater emphasis to customer relationships and achieving operational effectiveness and efficiencies across the business.



Challenges

Ageing infrastructure

We undertake regular assessments of the condition of our critical assets so that we can replace deteriorating assets before they fail. A significant proportion of our water and sewerage infrastructure was constructed in the 1960's, and is becoming increasingly prone to deterioration.

For example, the Mugga water reservoir, built in 1967, needs its roof replaced. Failure to do so could result in a structural failure, which in turn could cause water contamination and a serious safety incident.

The renewal of these important assets to ensure that we can continue to maintain our current service levels is a critical challenge over the next regulatory period.

Asset renewal

We are planning to allocate about 67 per cent of our capital program over the 2018–23 regulatory period to replace critical infrastructure.

To meet this challenge, we are proposing to focus about two-thirds of our total forecast capex for 2018–23 on renewing critical infrastructure. See the section on [Keeping our costs down](#) for more detail.



New focus on urban infill

Urban intensification in the ACT has traditionally been through the building of new greenfield suburbs on our urban fringes. Housing development in the ACT's new suburbs is being complemented by urban infill in already developed suburbs (brownfields). 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, whereby developers pay 100 per cent of the cost of any augmentation required to service their development, regardless of the size of augmentation required, were intended for greenfield development. These 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 with Icon Water.

In order to resolve this, Icon Water has proposed a new capital contributions scheme which will provide a fairer way of

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 per-Equivalent Population precinct charge of \$1,200 that applies across brownfield 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 to the scheme until 1 July 2019, 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.

funding water and sewerage infrastructure upgrades that are triggered by brownfield developments.

The proposed scheme is currently being considered by the [ICRC as an industry code under the *Utilities Act 2000*](#).

Figure 2: Our infrastructure classes



Higher energy costs

Energy costs, largely electricity, are our second largest operating cost category after labour. Electricity prices will rise by about 19 per cent from 1 July 2017 and are not expected to moderate in the foreseeable future. Although we are taking steps to reduce our reliance on the grid through our renewable energy program, annual energy costs are expected to rise.

Information and communication technology rollout

Information and communication technology (ICT) is critical to driving improvements in our operational effectiveness and efficiency and providing excellent customer service.

We have embarked on a rolling capex investment program to ensure we have an integrated and streamlined ICT capability across the business. This includes:

- renewing core operational systems to improve security and performance
- integrating mobility capability to increase operational efficiency
- adding new business and asset analytical systems to drive data-driven decision-making
- making better use of cloud infrastructure to reduce costs.

See the section on [Keeping our costs down](#) for more detail.

Capital contributions

The proposed capital contributions scheme will provide a fairer way of funding water and sewerage infrastructure upgrades that are triggered by brownfield development projects.

Avoiding continued revenue shortfalls

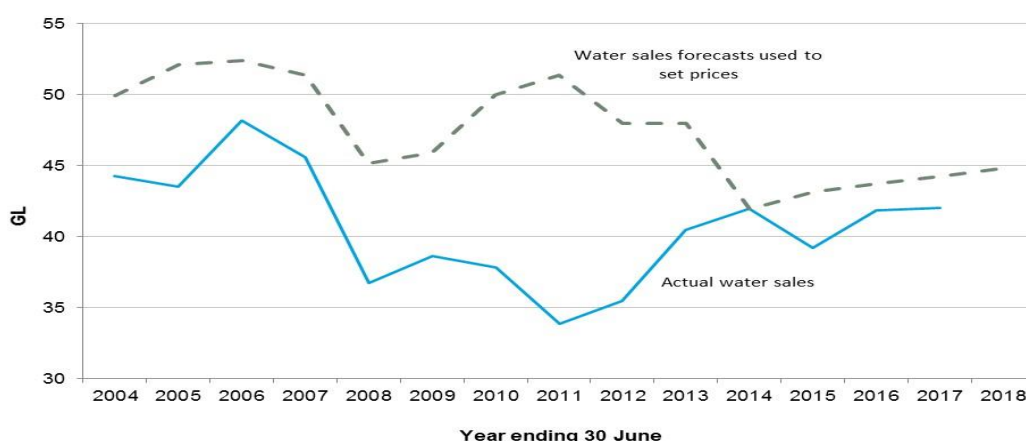
In 2015, the Industry Panel set water volume forecasts at historically high levels. Observed data shows that the Panel's forecasts have turned out to be about 6 per cent too high (see Figure 1).

Our costs do not vary much with demand in the short to medium term. This means that current water prices have not been set high enough for us to fully recover the efficient cost of providing water services from customers. We estimate that we will miss out on about \$56 million of revenue this regulatory period. This follows an even greater revenue shortfall in the 2008–13 regulatory period estimated at about \$268 million.

This situation is not financially sustainable in the long-run and requires resetting water volume forecasts for the 2018–23 period at more realistic levels.

The impact of this is significant upward pressure on water prices before any consideration of costs.

Figure 1: Water sales volumes



Reforming our water tariff

The ICRC has recently conducted a [review of Icon Water's current tariff structures](#). The review concluded that our current water tariff structure is inefficient.

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, particularly for commercial customers (see Figure 3). We currently recover about 90 per cent of our allowed water revenue from usage charges, with the balance collected via the fixed charge.

The ICRC identified that the high tier 2 price provides an incentive for large customers with access to alternative water supplies to bypass our primary water network at a net cost to the community.

The ICRC suggested that the water tariff structure could be improved for the benefit of the ACT community by making some careful adjustments to the balance between fixed and usage charges.

We agree with the ICRC's findings, and, in consultation with our customers, are proposing a measured and gradual change to our water tariff structure.

Water tariff changes

We are proposing a measured and gradual change to our water tariff structure that will carefully adjust the balance between fixed and usage charges over time.

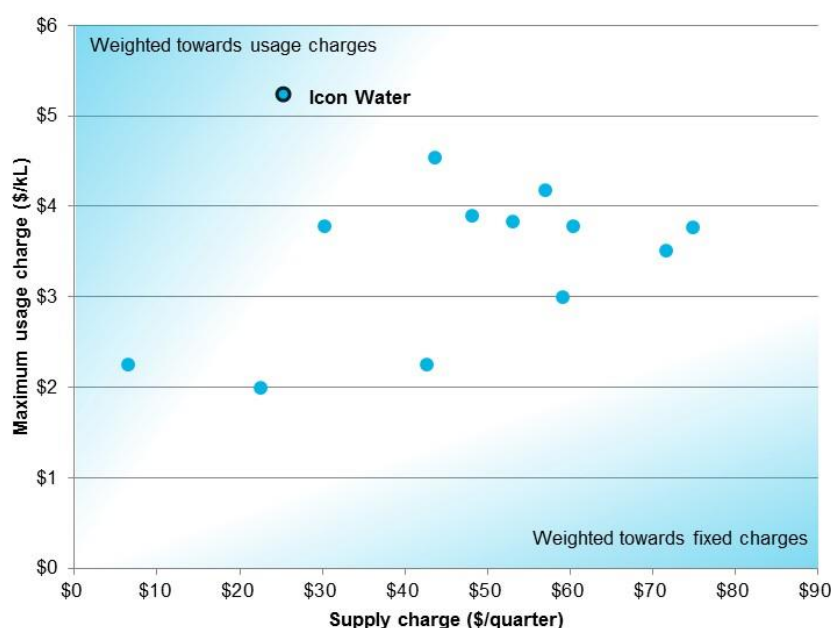
See the section on [Fair charging and affordable prices](#) for more detail on our tariff proposal.

Meeting the challenges

The challenges we are facing over the 2018–23 period are complex. They range from price pressures arising from the need to reset water volumes, renewal of critical assets and rising regulatory and energy costs, to the complexities of introducing fairer infrastructure funding and more efficient water pricing.

Maintaining fair and affordable pricing in these circumstances without compromising service reliability or quality has been our principal focus in developing our 2018 price proposal. Our approach to delivering this outcome is described in the remainder of this document.

Figure 3: Residential supply and usage charges, major Australian water utilities



What do our customers want?

In line with our commitment to meet customer needs and exceed customer expectations, our five-year pricing proposal has been informed and refined by extensive consultation with our customers over the last 18 months.

The issues canvassed included customer priorities, willingness to pay for different service levels, tariff reform, capital contributions and liquid trade waste charging arrangements.

We have consulted our customers using a range of mechanisms including customer surveys, targeted research and a number of forums.

The Icon Water Community Consultation Forum was established in June 2016 as an advisory body. The forum is made up of community representatives who provide us with advice on customer and consumer interests in relation to our business.

See iconwater.com.au/talkingiconwater for more detail.

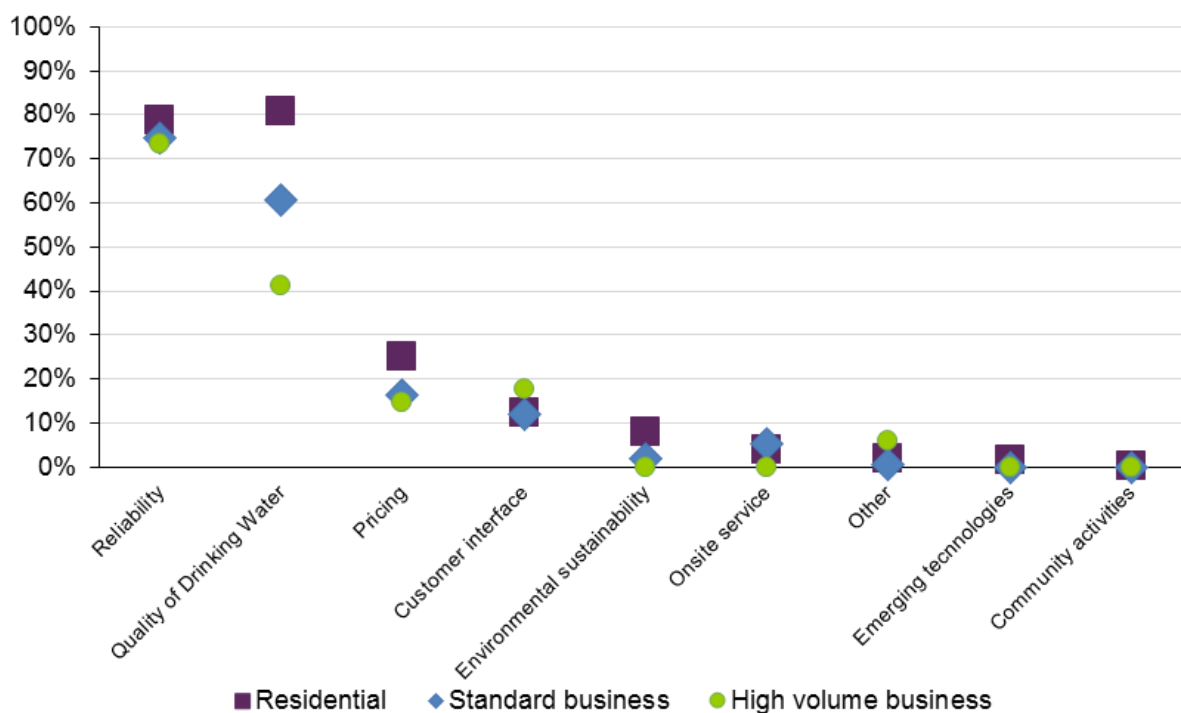
Customer views

We asked our customers about their views on:

- service priorities
- willingness to pay for different service levels
- tariff reform
- liquid trade waste charging arrangements, and
- capital contributions.

‘Sewerage is more important than water, particularly in clean up response time. Inconvenience level higher - also health implications.’

Figure 4: Customer priorities



Customer service priorities

In September 2015 we carried out a telephone survey of representative samples of three types of customer (300 residential, 166 standard business and 34 high-volume businesses) to identify what aspects of our services matter most to customers.

The results show that the top five customer priorities are:

- network reliability – a reliable water supply takes centre stage followed by a rapid response to problems and reliability of sewerage infrastructure
- quality of drinking water – safe drinking water takes precedence followed by taste and discolouration
- pricing – affordable and fair pricing are equally important
- customer service – quality of the billing system and call centre service are the key priorities
- environmental sustainability.

See [Attachment 3: Service standards](#) for more detail on this survey.

The five identified priorities have shaped our 2018 price proposal and are reflected in the [Key outcomes](#) section.

‘Just keep it clean and reliable.’

‘Keep the prices down.
Making it more affordable means we can use more water.’

‘Sustainable means low carbon usage and not using more water that is available’

Customer service priorities



Reliable
supply



Quality
drinking water



Affordable
pricing



Customer
service



Environmental
sustainability

Willingness to pay for changes in service levels

We are faced with a trade-off between network reliability and fair and affordable pricing – two of the top five priorities identified above. We could spend more on improving network reliability, but this would increase prices. We could reduce prices by spending less on maintaining our infrastructure, but our services would become less reliable over time.

We undertook further work to understand how customers wanted us to balance these two priorities. The service outcomes for customers we focussed on were the nature and frequency of water supply interruptions and sewage overflows.

In partnership with Professor Riccardo Scarpa of the University of Waikato, we conducted a rigorous stated preference study to estimate the dollar changes in annual water and sewerage bills that

customers would be willing to trade for better or reduced service levels:

- **willingness to pay** – the maximum bill increase customers would be willing to pay for a specified service improvement
- **willingness to accept** – the minimum bill decrease customers would be willing to accept as compensation for a specified service degradation.

The results show that:

- households place a much higher value on avoiding sewage overflows than on avoiding water supply interruptions
- willingness to pay for service improvement is lower than the compensation customers would require for an equivalent service degradation.

The way in which the estimates of willingness to pay influenced our 2018 price proposal is discussed in the section on [Maintaining our service levels](#). See [Attachment 3: Service standards](#) for more detail on this stated preference research.

Water supply interruptions

Customers receive two days written notice of **planned interruptions** to undertake work on the water network, such as replacing water meters.

No notice is given for **unplanned interruptions**, usually due to an unexpected fault, such as a water main burst due to wear and tear.

At extra cost we can reduce:

- the number of unplanned interruptions by installing more pressure reducing valves and replacing ageing pipes.
- the time taken to restore water supply by increasing the number of crews undertaking works during planned interruptions and repairing burst mains during unplanned interruptions.

Sewage overflows

Sewage overflows are caused by blocked pipes as a result of pipes breaking, incursion of tree roots or incorrect disposal of waste (such as cooking grease or baby wipes).

At extra cost we can reduce:

- the risk of sewer blockages by more pipe monitoring and cleaning and replacing ageing pipes
- the time taken to unblock sewers and clean up overflows by increasing the number of crews trained and made available to undertake this work.

Tariff reform

In developing our proposed water and sewerage tariff structures for the 2018–23 period, we sought feedback from our customers in two main ways.

First, we ran an online survey on tariff structure issues during May and June 2016 in which 607 residential customers participated. Residential customers represent around 94 per cent of our demand by customer numbers and around three quarters of our demand by water volume.

Second, we held several discussions with our Community Consultation Forum.

Survey results

Around half of respondents were in favour of a move from the current two-tier water 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 rebalancing from usage charges to fixed charges, in principle. Again, support was much lower once the potential bill impacts of the change were considered.

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

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

‘Residential and commercial customers are all members of the community and it is fair that they pay the same rate for water.’

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

‘Tier 2 is a good way to discourage extra use of a limited natural resource.’

Community Consultative Forum views

The following views appear to have broad support within the group:

- a move to a single tier water usage with price set at marginal cost 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 commercial customers and potentially other types of customer
- any price decreases for large users should not be at the expense of small users.

The way in which these customer views on tariffs influenced our 2018 price proposal is discussed in the section on [Fair charging and affordable prices](#). See [Attachment 12: Tariff structure](#) for more detail on the tariff survey.

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

‘Should pay less because they are helping the environment’

‘Usage charges are the only fair charges.’

Liquid trade waste

Discharge of liquid trade waste 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.

Icon Water does not currently have any specific pricing arrangements in place for trade waste. To date, the cost of collecting and treating this waste has been borne by all customers, rather than being directly recovered from those customers discharging the waste.

We are currently in the process of developing a trade waste charging system. The aim is to encourage behaviour change by incentivising pre-treatment by customers that would reduce overall collection and treatment costs.

As a key part of the development process, we have undertaken a preliminary consultation process to better understand:

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

The consultation included a public forum and 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 are:

- levels of understanding of trade waste and the role of trade waste agreements and pre-treatment requirements in the business community is quite low

What is liquid trade waste?

Liquid trade waste is classified as:
'All liquid waste that is discharged to the sewerage system other than domestic sewage'.

Sources of liquid trade waste include:

- industrial processes
- food businesses
- service stations
- schools (science laboratories, canteens)
- medical and veterinary clinics
- hair dressing and beauticians.

- general agreement that a charging system would lead to better practices in managing liquid trade waste
- 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
- strong support for compliant customers paying less than those that do not comply.

The way in which customer views on trade waste charging influenced our 2018 price proposal is discussed in the section on [Fair charging and affordable prices](#).

Capital contributions

Our proposed capital contributions scheme was informed by extensive consultation over a three-month period from December 2016 to March 2017.

We consulted with a range of stakeholders including property developers, peak industry bodies, development consultants and professionals, the ACT Government, community organisations, our Community Consultation Forum and customers.

Our 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 than in our original proposal
- some concerns about the application of use of equivalent population as the basis for applying the precinct charge.

The way in which stakeholder views on the proposed capital contributions scheme were taken into account is discussed in the section on [Fair charging and affordable prices](#).

For more detail on the stakeholder consultation on capital contributions see icrc.act.gov.au/water-and-sewerage/capital-contribution-code/.



Maintaining our customer service standards

Our service performance, notably network reliability, drinking water quality and general customer service, was identified as a key customer priority.

Icon Water has a number of specific service standards – or targets – against which our performance is measured on an annual basis. These standards largely reflect a combination of two drivers: achieving the levels of service that customers want, and are prepared to pay for, and compliance with various technical, environmental and consumer protection regulatory obligations.

For example, Icon Water has a customer service target of 5.4 to 7.5 water and sewerage complaints per 1,000 properties each year. Our water quality standards are also required to comply with our Drinking Water Utility Licence and the Australian Drinking Water Quality Guidelines 2011.

In addition to measuring performance against particular service standards, we also undertake periodic telephone surveys to measure general customer satisfaction with our services.

Compliance with our service standards and regulatory obligations are a major driver of the costs we face in the construction, operation and maintenance of our water and sewerage network.

Current performance

Icon Water has outperformed almost all of the key service targets we set at the 2013–18 price review and maintained a high standard of service performance over the 2013–18 regulatory period. There is a high level of satisfaction among our customers. We now have a high level of water security and the quality of the drinking water our customers enjoy has been recognised with the Best Tasting Water award for ACT/NSW at the 2017

Water Industry Operators Association of Australia conference.

Reflecting customer preferences

Using the results of our willingness to pay study discussed in the section on [What do our customers want?](#), Icon Water undertook a benefit-cost analysis to understand the implications of customer preferences on service outcomes from increasing or reducing spending on network renewals and other types of proactive maintenance.

The results indicate that customers:

- are not willing to pay for increased spending on proactive investment in the water network
- would be willing to accept an increase in the rate of water supply interruptions, given the bill savings that would entail
- are not willing to pay for increased spending on proactive investment in the sewerage network.

In response to these findings, we propose to:





- reduce the amount we spend on water mains renewals
- maintain the level of proactive sewerage maintenance.

Targets for 2018–23

Although we are planning to reduce costs significantly in the 2018–23 period, we will not be making these cost savings at the expense of service quality.

Our proposed service standard targets for 2018–23 are detailed in Table 1. For more information on our customer service levels see [Attachment 3: Service standards](#).

Table 1: Key service targets

Customer priority	Measure	Target 2013–18	Average 2011–16	Target 2018–23
 Customer service	Survey respondents 'satisfied' or 'very satisfied' with Icon Water's service (%)		86	> 90
	Total water and sewerage complaints (per 1,000 properties)	5.4–7.5	4.4	< 5
	Meaningful response to complaints within 20 business days (%)		97	100
	Calls answered by an operator within 30 seconds (%)		72	> 80
 Quality drinking water	Drinking water: population where microbiological compliance was achieved (%)	100	100	100
	Average frequency of unplanned interruptions - water (no per 1,000 properties)	116–126	84	95
	Average duration of an unplanned interruption - water (minutes)	111–112	125	130
 Reliable supply	Average planned water supply interruption duration (minutes)		23	23
	Unplanned interruptions to sewerage services per year		1,471	1,630
	Average sewerage interruption (minutes)	38–44	37	40
	Number of sewer surcharges inside customer dwellings per annum			<=15
 Environmental sustainability	Incorporate a sustainability infrastructure scorecard into 100 per cent of capital projects over \$50,000			
	Reduce our waste to landfill year on year			
	Achieve 100 per cent compliance with environmental flow requirements, environmental authorisations and agreements			

Protecting our environment

Environmental sustainability is one of the top five customer priorities identified in our consultation processes. As a territory-owned corporation, we are required, where our activities affect the environment, to effectively integrate environmental and economic considerations in decision-making processes.

We are committed to managing the environment in which we operate, and maintain an accredited Environmental Management System. This includes ensuring all staff are made aware of their environmental responsibilities.

Integration into business practices

Environmental sustainability, applied in an adaptive way, is central to the way we run our business. For example, Icon Water has a Sustainability Framework with the principles:

- enrich our neighbourhood
- respect resources
- care for tomorrow.

These principles are embedded into and influence our decision-making through the Sustainability Scorecard assessment process for all asset management and capital works projects.

Regulatory environmental requirements

We maintain compliance with all environmental obligations.

Key amongst these is the ACT Government's environmental flow requirements. We work closely with the ACT Environment Protection Authority (EPA) to ensure that we comply with stringent environmental licensing, authorisations and project approval conditions.

For example, we have strict limits on the salt levels we are allowed to discharge into the Lower Molonglo River from our primary sewage treatment plant, the Lower Molonglo Water Quality Control Centre.

We have Environmental Management Plans for all our major sites, in accordance with ACT EPA requirements, to avoid and minimise the potential for impacts on the environment.

We continue to manage the carbon offset plantations and biodiversity offset programs that we established during the construction of the enlarged Cotter Dam and Murrumbidgee to Googong pipeline.

The protection and management of threatened fish in the Cotter River catchment is ongoing, through our *Fish Management Plan*.

Water resource planning

We are a major contributor to water resource planning in the ACT and surrounding region. We are currently involved, along with the ACT Government and surrounding NSW local government in implementing the *ACT and Region Catchment Strategy 2016–46*, to drive more holistic and sustainable water resource management outcomes.

Icon Water also participates in undertaking actions detailed in the *ACT Water Strategy 2014–44: Striking the Balance Implementation Plan*.

Environmental monitoring

Icon Water also has a comprehensive environmental monitoring program for the Queanbeyan, Cotter and Murrumbidgee Rivers and Burra Creek. These programs are critical in ensuring that our current and proposed operations are undertaken in a manner that protects the environmental values of the area.

We make reports of environmental flow data and a range of other monitoring programs available to the public.

Land management

Icon Water responsibly manages the land in which it operates including in public space, nature reserves and leased land. Icon Water has a *Site Management Agreement* under the *ACT Nature Conservation Act 2014* and works closely with the ACT Government land managers.

Annually, we implement hazard reduction activities at our sites through our Bushfire Operations Plan.

Renewable energy

In 2015, Icon Water developed its Carbon and Energy Strategy with a focus on improving energy management by embedding energy principles within existing business strategies and plans and implementing projects that deliver energy efficiencies.

Our renewable energy project has a focus on solar and hydro-electric power generation. Initiatives to date include the recommissioning of the Googong mini hydro, and development of ground mounted solar installations. These and other similar projects planned over the 2018–23 regulatory period will help Icon Water realise cost savings, energy efficiencies and reduce greenhouse gas emissions.

Outcomes through stakeholder engagement

Icon Water works with catchment groups and other community environmental organisations to ensure the land and waterways in our water supply catchments are protected. This includes funding of Waterwatch to supplement our aquatic environmental monitoring program.

We continue to engage with the ACT Government on the development of strategies, such as the *ACT Waste Management Strategy 2011–2025* and the *ACT Climate Change Adaptation Strategy 2016*.

Water security planning

Icon Water acknowledges that Canberra is at risk from climate change and has taken steps to consider potential climate change impacts in our water security planning.

For example, our water supply and demand model takes into account the potential impacts of climate uncertainty on water supplies using climate projections produced by the South Eastern Australian Climate Initiative.

These climate change projections have also been utilised in the water demand model we have developed to forecast water sales volumes for the 2018–23 regulatory period.



How are our prices set?

Icon Water's water and sewerage prices are set by the ICRC and are calculated using the building-block method.

In simple terms, this involves the following steps (see Figure 5):

1. Identify forecast cost building-blocks – operating costs, return on capital, depreciation and tax – together these make up our **total revenue requirement**.
2. Calculate the **net revenue requirement** – by adjusting our total revenue requirement to account for other unregulated revenue, such as bulk water sales revenue from Queanbeyan.
3. Forecast the **demand** for our services – water customer numbers and water sales volumes, sewerage customer numbers and billable fixture numbers.
4. Divide our **net revenue requirement** by forecast demand to get our **prices**.

See the section on [Keeping our costs down](#) for more information on our cost building-blocks.

Our cost building-blocks

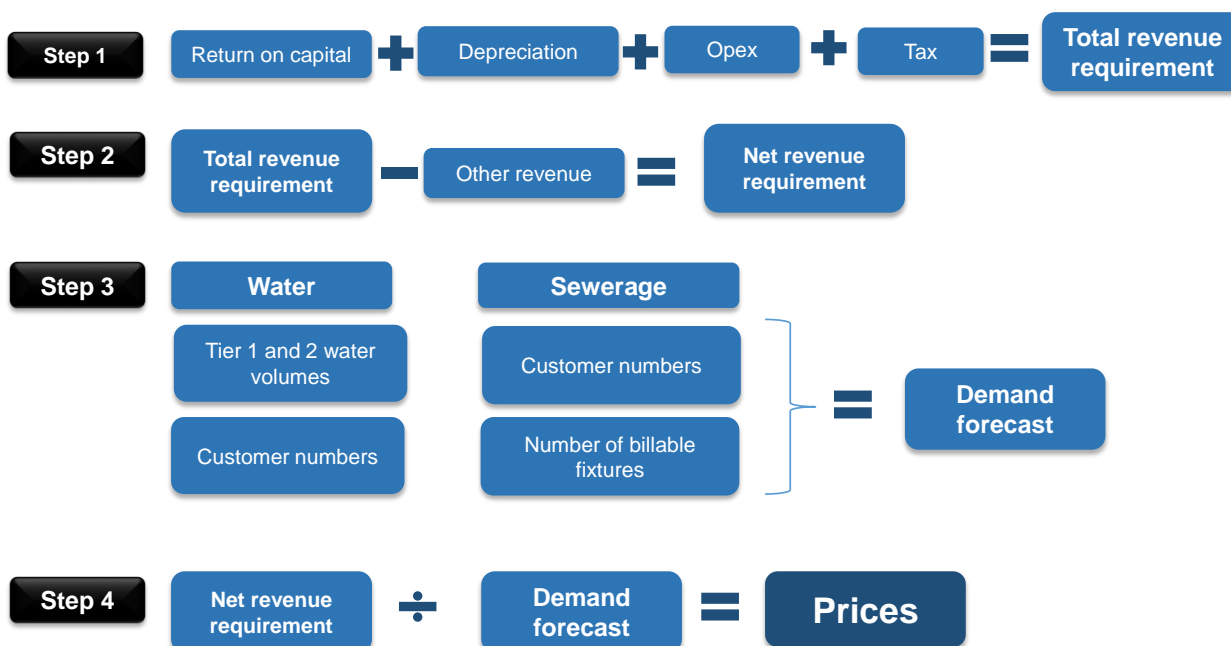
Operating costs are the day to day costs of running our water and sewerage network – such as staff salaries, chemicals for water treatment and energy to pump water and sewage.

Return on capital covers the cost of servicing our debt and provides a return to our shareholders. This is calculated by multiplying our **regulated asset base** – which records the value of our water and sewerage assets – by the **weighted average cost of capital (WACC)**.

Depreciation acknowledges that our assets wear out over time.

Tax costs are our tax liabilities net of the value of imputation credits.

Figure 5: Calculating prices



Keeping our costs down

In order to maintain fair and affordable pricing in the face of significant price pressures discussed in the [Context and key challenges](#) section, we have put substantial thought and effort into finding efficiencies over the 2018–23 regulatory period. Cost efficiencies are savings that come from doing things better and cutting costs.

In seeking efficiencies, we have been careful not to compromise the service reliability and quality that our customers expect us to deliver.

Expenditure planning processes

In order to manage and operate our water and sewerage infrastructure as efficiently and effectively as possible, we apply a rigorous asset management system based on the following key principles:

- integrating our capital (capex) and operating (opex) expenditure decisions
- identifying the least cost solution
- prioritising projects by balancing risk against cost
- monitoring project delivery
- sound governance structure.

Integrating our capex and opex decisions means that we actively consider the trade-off between capital investment and operating costs for any particular project. This means, for example, that capital works are only undertaken when there is no cost effective operational alternative.

At the project identification stage, the focus is on identifying the least cost solution that best deals with the particular problem at hand.

To ensure that Icon Water only implements investment projects that we really need to meet our service delivery standards, we undertake a project



prioritisation process that allows us to assess projects in a consistent and systematic manner. Potential projects are assigned a priority score based on their ability to address risks to the network and advance our strategic objectives. The priority score is then used to determine which projects make it into the capex program.

A gateway approval process is used to ensure that individual projects and programs are monitored at predefined gates as they move through the project lifecycle, so that each adds value to our asset base and is delivered in the most efficient manner.

We have also instituted sound governance arrangements that support our expenditure and asset management planning processes.

For more information on our processes and governance arrangements see [Attachment 5: Asset management and governance](#).

Operating expenditure

Our opex is split into those costs that we have some control over (controllable), and those that we do not (non-controllable). The former includes labour and energy costs while the latter comprises the ACT Government's Water Abstraction Charge and Utilities Network Facilities Tax, which accounted for 21 per cent of total costs in 2016–17.

We are proposing a substantial reduction in our controllable opex over the 2018–23 regulatory period – a 10 per cent real reduction over five years after accounting for inflation – compared to our regulatory allowance in the last year of the 2013–18 regulatory period (see Table 2).

Our cost savings are largely due to business restructuring during the 2013–18 regulatory period, the full benefit of which will be realised after the completion of our major ICT capex initiative, the Business Transformation Program (BTP). The BTP, along with other continuous improvement initiatives, will allow Icon Water to meet current and future customer requirements with a reduced level of operating expenditure.

These savings are offset by:

- expected increases in input prices, particularly electricity

Controllable opex forecasting

We have used the **base-step-trend** approach to forecast our controllable costs:

- Step 1: Establish the **efficient base year** – this is 2016–17
- Step 2: Make adjustments to base year opex for costs that will not continue
- Step 3: Make annual adjustments to account for real price change, output growth and productivity growth to **trend** the base year opex across the regulatory period
- Step 4: Add **step changes**.

- minor step change relating to economic regulatory costs.

Our proposed reduction in total opex is made despite an expected increase in non-controllable costs.

For more information on our opex performance and forecasts see [Attachment 7: Operating expenditure](#).

Table 2: Opex forecast by category (\$ million, 2017–18)

	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Water	Industry Panel						
Controllable	70.33	60.2	59.6	59.3	60.5	60.1	299.8
Non-controllable	33.36	33.9	34.4	35.0	35.6	36.2	175.1
Sewerage							
Controllable	76.27	71.7	71.0	70.5	71.8	71.4	356.3
Non-controllable	4.25	4.5	4.7	4.9	5.0	5.2	24.4
Total opex	184.2	170.4	169.7	169.6	173.0	172.9	855.5

Capital expenditure

2013–18 period performance

Icon Water's main capex focus during the 2013–18 regulatory period was the Lower Molonglo Water Quality Control Centre, including renewal of the aeration system and solids handling upgrades. We also put substantial effort into replacing water and sewer mains.

The BTP was established to drive change in our asset and works management and introduce ICT-led operational efficiencies by replacing old operational systems, introducing mobile devices in the field, integrating new customer service technology and replacing ICT infrastructure with a lower-cost cloud equivalent. This will allow us to run our business more efficiently and effectively into the future.

We expect to spend a total of \$416 million on capital assets in the 2013–18 regulatory period, \$171 million on water services and \$245 million on sewerage services. This includes \$78 million on non-system assets (ICT, buildings etc.), which is allocated between water and sewerage. Our expenditure is about \$57 million or 12 per cent less than our regulatory allowance. A number of factors have contributed to this variance, including reprioritisation and deferral of projects and reclassification of project costs between opex and capex.

Capex drivers

We have four capex drivers:

- **Growth** – works to create new, upgraded or improved assets to meet changes in usage, customer expectations or future needs
- **Asset renewal** – works to replace or restore assets to original size, condition or capacity
- **Efficiency** – works to improve performance of existing assets
- **Regulation** – works to improve service standards, ensure regulatory compliance.

Top five forecast capex projects

Our top forecast capex projects are:

- Lower Molonglo Water Quality Control Centre renewal and upgrade program
- sewer mains renewal program
- Belconnen trunk sewer augmentation
- North Canberra sewer augmentation stage 1
- water meter renewals program.



2018–23 period forecast

Our forecast capex for the 2018–23 period is \$438 million. This includes \$177 million and \$261 million allocated to water and sewerage assets respectively. We are forecasting \$32 million of this program to be funded by developers.

The main focus of our forecast program is the renewal of critical infrastructure at the end of its useful life, to ensure we can maintain customer service levels. Two-thirds of total capex is for renewal projects. ICT systems will be extended to allow the collection of greater volumes of real-time operational data and incorporate business/ asset analytics for improved data-driven decision-making.

We will also make substantial investments in the upgrade and expansion of the network to support growth in the ACT, accounting for 19 per cent of the program. The remaining 14 per cent of the program spend will be on asset improvement to ensure regulatory obligations are met and

Capex forecasting method

1. **Project identification** – based on project need
2. **Project base forecast** – initial scoping and cost assessment
3. **Review forecasts** – independent review of initial cost forecasts
4. **Prioritise projects** – all projects ranked by priority score
5. **Evaluate program deliverability** – projects evaluated at a program level and scheduled to ensure delivery
6. **Apply escalation factors** – independent escalation factors applied to each project
7. **Forecast capex** – final capex forecasts obtained.

respond to opportunities to generate operating efficiencies.

For more information on our capex performance and forecasts see [Attachment 6: Capital expenditure](#).

Table 3: Capex forecast by category (\$ million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Water						
Asset renewal	27.2	33.8	29.4	29.7	22.8	143.0
Growth	2.8	3.3	1.6	0.0	0.0	7.7
Regulatory	4.5	3.7	7.7	3.3	0.4	19.7
Efficiency	3.0	0.7	0.7	0.4	1.8	6.6
<i>Total water capex</i>	<i>37.4</i>	<i>41.6</i>	<i>39.4</i>	<i>33.4</i>	<i>25.0</i>	<i>176.9</i>
Sewerage						
Asset renewal	47.2	32.5	27.8	22.9	20.2	150.6
Growth	4.6	14.5	16.6	23.6	14.0	73.4
Regulatory	9.0	3.5	5.8	3.7	2.6	24.6
Efficiency	7.0	1.4	1.1	0.5	2.2	12.1
Capital contributions	1.7	7.0	7.6	10.1	5.1	31.6
<i>Total sewerage net capex</i>	<i>66.1</i>	<i>44.9</i>	<i>43.6</i>	<i>40.7</i>	<i>33.8</i>	<i>229.0</i>
Total gross capex	105.3	93.6	90.7	84.1	64.0	437.6
Total net capex	103.5	86.5	83.0	74.0	58.8	405.9

Return on capital

The return on capital covers the cost of servicing our debt and provides a return to our shareholders for their equity investment in our business. It is calculated by multiplying the value of our regulated asset base by the rate of return – commonly known as the WACC – the weighted average cost of debt and return on equity.

We have estimated the rate of return that would apply to a benchmark efficient firm, applying the same method as the Industry Panel used in its 2015 final decision.

Our proposed rate of return for the 2018–23 regulatory period is 6.07 per cent (see Table 3). This is much lower than our current rate of return of 7.20 per cent, largely due to the reduction in the risk-free rate and debt margin since the Industry Panel's 2015 decision.

Table 3: Rate of return parameters

Parameter	Current	Proposed
Risk-free rate	3.22%	2.78%
Debt margin	3.13%	2.08%
Debt raising costs	0.125%	0.125%
Cost of debt	6.48%	4.99%
Equity beta	0.70	0.70
Market risk premium	7.23%	7.03%
Gearing	60%	60%
Return on equity	8.28%	7.71%
Nominal 'vanilla' WACC	7.20%	6.07%

Table 4: Forecast net revenue requirement (\$ million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23
Water	Industry Panel					
Return on capital	\$71.1	\$54.0	\$55.8	\$57.6	\$59.2	\$60.3
less other income	\$16.0	-\$14.8	-\$15.1	-\$15.4	-\$15.8	-\$16.2
less CSO revenue	\$1.7	-\$1.7	-\$1.8	-\$1.8	-\$1.8	-\$1.8
plus depreciation	\$30.3	\$31.1	\$34.5	\$37.6	\$40.4	\$41.8
plus opex	\$103.7	\$96.5	\$98.8	\$101.5	\$106.1	\$109.0
plus tax	\$2.8	\$2.4	\$2.1	\$2.0	\$1.7	\$2.0
Net revenue requirement	\$190.3	\$167.5	\$174.4	\$181.4	\$189.7	\$195.1
Sewerage						
Return on capital	\$42.3	\$30.8	\$32.9	\$34.4	\$35.9	\$37.0
less other income	\$11.4	-\$13.5	-\$13.9	-\$14.2	-\$14.5	-\$14.9
less CSO revenue	\$0.6	-\$0.6	-\$0.7	-\$0.7	-\$0.7	-\$0.7
plus depreciation	\$26.9	\$26.5	\$30.5	\$33.6	\$36.4	\$38.8
plus opex	\$80.5	\$78.2	\$79.5	\$81.1	\$84.8	\$86.6
plus tax	\$1.6	\$4.6	\$3.9	\$3.5	\$2.7	\$2.6
Net revenue requirement	\$139.4	\$126.0	\$132.3	\$137.8	\$144.6	\$149.5

Net tax liabilities

We propose to apply a value of 0.25 for imputation credits (gamma) rather than the 0.50 used by the Industry Panel. Our proposal reflects more recent regulatory decisions.

Revenue requirement

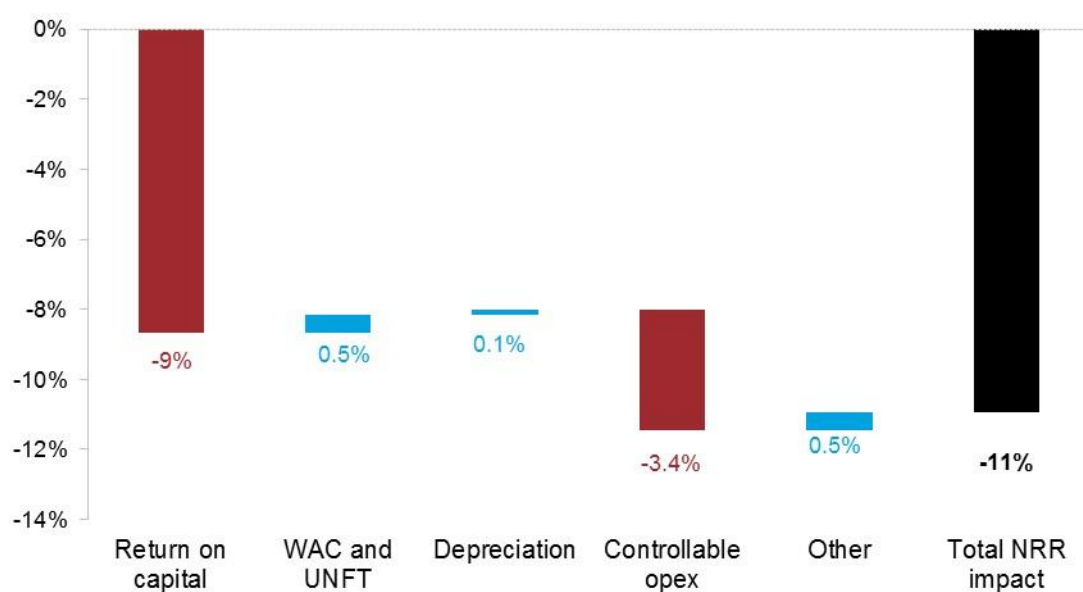
Icon Water's proposed net revenue requirement (NRR), which is the amount we propose to recover from our customers over the 2018–23 regulatory period, is detailed in Table 4. The components of the change from the final year of the current regulatory period to the first year of the 2018–13 regulatory period are illustrated in Figure 6.

The significant reductions in water (12 per cent) and sewerage (10 per cent) revenue requirements are largely due to:

- reductions in the return on capital, mainly driven by the lower rate of return
- lower controllable opex due to the substantial efficiencies we are proposing.

For more information on our forecast revenue requirement see [Attachment 11: Revenue requirement and price path](#).

Figure 6: Components of change in water and sewerage NRR, 2017–18 to 2018–19



What is the demand for our services?

Resetting water volumes

Icon Water is proposing a different, more robust model to forecast water sales over the 2018–23 period than that used by the Industry Panel.

The model

Our proposed model, adapted from the approach promulgated by the ICRC in 2015, is an econometric model – an autoregressive integrated moving average (ARIMA) model – that uses daily dam releases and climate data to forecast dam releases. These forecasts are then converted to monthly water sales forecast by consumption tier.

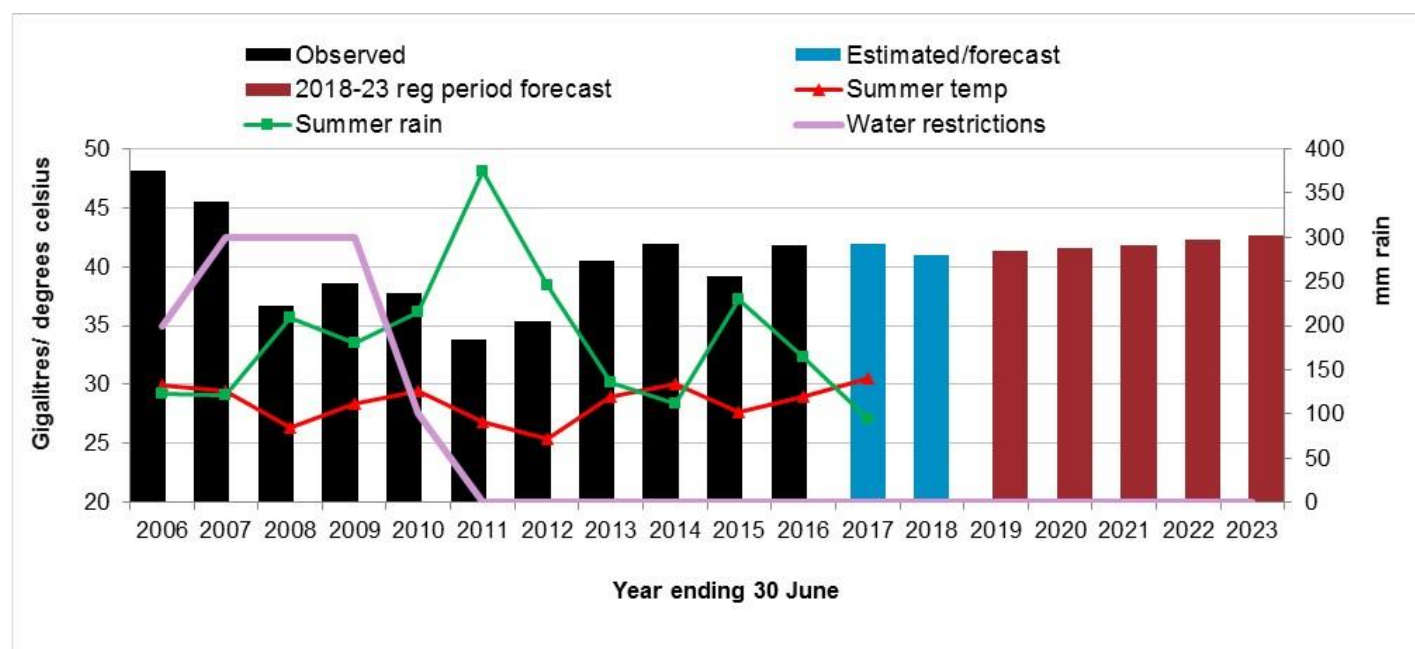
The ARIMA approach is widely used to model high frequency time series data that is characterised by autocorrelation of the error terms, as is the case here. In choosing this approach and developing the model we have employed a robust principles-based process.

Our ARIMA demand model

A seasonal ARIMA (2,0,1) (2,0,1)[7] model estimated over the period from July 2006 with the following explanatory variables:

- various temperature, rain and evaporation lags
- cumulative 7 days temperature
- cumulative 7 days rain
- cumulative seven days rain x evaporation
- daily dummies – Sunday to Friday
- December and summer dummies
- water installation numbers, and
- a Fourier seasonal term – to capture annual seasonality.

Figure 7: Observed and forecast water volumes



Our proposed model:

- is simple, transparent and replicable
- has a sound statistical basis – we have subjected the model to a robust and objective model selection process using the Box-Jenkins approach
- is based on daily dam releases – which allows the use of daily climate data, a much richer data series than available to models relying on monthly water sales data
- is designed to produce multi-year forecasts
- performs well when tested for forecast accuracy in comparison to alternative models.

Water sales forecasts

Using this model, we are forecasting:

- water sales of 41.3 GL in 2018–19, a step down of eight per cent from the 44.8 GL forecast by the Industry Panel for 2017–18

- average water sales of 42.0 GL per year over the 2018–23 regulatory period.

Customer numbers

Our water and sewerage customers and billable fixtures forecasts, based on the average growth rate over the five years leading up to the 2018–23 period, are detailed in Table 6.

For more information on our demand forecasts see [Attachment 4: Demand forecasts](#).

Table 5: Forecast water sales by tier, ML

Year	Total	Tier 1	Tier 2
2018–19	41,325	25,323	16,002
2019–20	41,618	25,613	16,005
2020–21	41,880	25,881	15,999
2021–22	42,278	26,199	16,079
2022–23	42,662	26,506	16,156

Table 6: Forecast customers and billable fixtures

Year	Water customers	Sewerage customers	Billable fixtures
2018–19	178,795	178,344	64,380
2019–20	182,083	181,609	65,377
2020–21	185,432	184,933	66,389
2021–22	188,842	188,318	67,417
2022–23	192,315	191,765	68,461

Our proposed regulatory framework

The form of regulation describes the framework that ICRC applies to determine and adjust the revenue that Icon Water can earn and the prices we can charge over the course of a regulatory period. In line with the views expressed by the ICRC in its 2017 issues paper, we are proposing a similar model to that applied by the Industry Panel, with a few improvements.

Full cost recovery

The ability for Icon Water to recover our allowed revenues – which are based on prudent and efficient costs – from our customers over the 2018–23 regulatory period is critical to ensuring our ongoing financial viability.

Our ability to recover revenues is largely determined by the form of price control applied by the ICRC. This is the price cap, revenue cap or hybrid mechanism that controls our prices for each year of the regulatory period.

In line with the Industry Panel model, we are proposing a hybrid price and revenue cap mechanism for the next regulatory period. However, to deal with demand volatility, we are proposing an annual unders and overs mechanism, rather than the current 6 per cent deadband arrangement.

Under the current arrangements we are expecting to under-recover about \$56 million of water sales revenue this regulatory period (see the [Context and key challenges](#) section).

We think that our proposal will provide a better outcome for our business by ensuring full and timely recovery of our allowed revenues, and for our customers by allowing us to quickly return any over-recoveries to them. Price stability would be ensured by including a price side constraint.

Our proposed form of regulation

In summary, we propose:

- a post-tax building-block method to determine maximum allowed revenues over the 2018–23 regulatory period
- a hybrid price and revenue cap form of price control over the 2018–23 regulatory period with individual price caps for water and sewerage services
- provision for negotiated contracts to avoid uneconomic bypass of our water supply network
- an annual unders and overs mechanism for water and sewerage services
- an annual price reset process with the ICRC adjusting prices to account for revenue shortfalls/ over collections in the previous year and any pass-through amounts, subject to an annual materiality threshold and pricing side constraint
- pass-through arrangements to deal with unexpected events
- a contingent project arrangement for the Best for Region Sewerage Treatment Plant.

Uneconomic bypass

We are also proposing a provision for negotiated contracts to avoid uneconomic bypass of our water supply network with prudent discounts recovered from the broader customer base.

See [Attachment 2: Form of regulation](#) for more information on our proposal.

Fair charging and affordable prices

Water tariff

Having listened to our customers, and in line with the ICRC's views, Icon Water is proposing a measured and gradual change to our water tariff structure that will carefully adjust the balance between fixed and usage charges over the 2018–23 regulatory period.

Our water tariff proposal shown in Table 7 includes:

- retaining the inclining block, two tier usage charges
- increasing the fixed supply charge by \$20 per year to \$200 by 2022–23
- reducing the tier 2 usage price to \$4.95 per kL in 2018–19 and then keeping it constant
- flexibility to negotiate pricing agreements with large customers that can demonstrate a credible opportunity for uneconomic bypass.

Our proposal provides some economic efficiency benefits while limiting impacts on the combined bills of typical residential customers. The latter is achieved by

funding the reductions in the tier 2 price through cost savings across our water and sewerage business segments.

We considered the possibility of separate water tariffs for different customer groups. However, after undertaking detailed analysis, we found that all of the options considered resulted in one or more of the following:

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

Sewerage tariff

In line with the ICRC's views, Icon Water proposes to retain the current sewerage tariff structure with its annual supply and fixtures charges.

Having regard to stakeholder feedback, and in particular the need for more consultation, we propose to introduce

Table 7: Forecast water and sewerage prices

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

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

trade waste charging arrangements during the 2018–23 regulatory period.

Miscellaneous charges

We propose to retain the current practice of increasing charges for miscellaneous services by the change in the consumer price index each year over the 2018–23 regulatory period.

Capital contributions charge

In response to stakeholder feedback, we made two key adjustments to our final capital contributions scheme proposal currently before the ICRC:

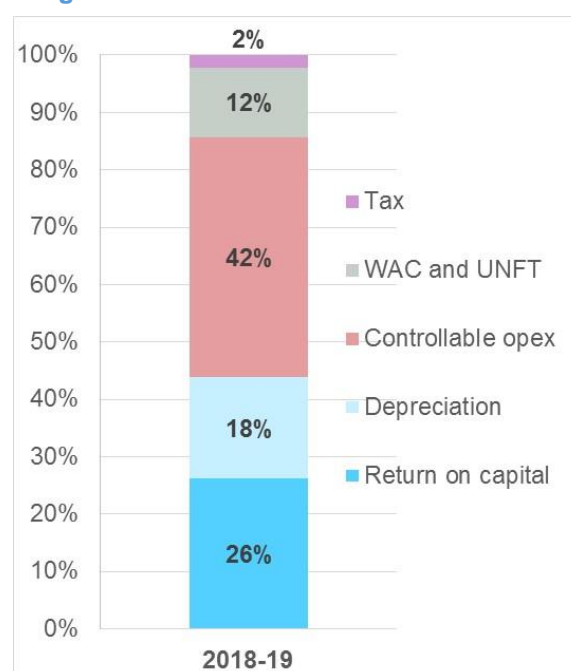
- transition arrangements have been extended from three-months to 1 July 2019, and are now based on development application lodgement (rather than approval) dates
- we are proposing that all of infill (or 'brownfield') Canberra be treated the same, rather than individual growth areas with differential pricing based on our sewerage catchments.

We have proposed a \$1,200 single precinct charge, which will be applied on the basis of the net increase in equivalent population resulting from the specific development. We propose an annual update of this charge based on updated population projections and project costs.

Bill impacts

A typical residential customer consuming 200 kL of water per year will see an increase in their combined water and sewerage services bill of 2.3 per cent, or

Figure 8: Combined bill cost stack



\$27 per year in 2018–19, compared to 2017–18. Bill increases in subsequent years are forecast to increase in line with forecast inflation (see Table 8).

Commercial customers can expect a combined annual bill change ranging from 0.9 per cent to minus 7.6 per cent, depending on the number of billable fixtures. Figures 9 and 10 overleaf show the impact of our proposed water and sewerage prices across the water usage distribution of residential and commercial customers.

See [Attachment 12: Tariff structure](#) for more information on our proposal.

Table 8: Impact on combined water and sewerage bill, 200 kL water user

	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23
Combined bill (\$ per year)	1,200	1,227	1,257	1,286	1,316	1,346
Change in bill (\$)		27	30	29	30	30
Change in bill (%)		2.3%	2.4%	2.4%	2.3%	2.3%

Figure 9: Residential customer impact, 2017–18 to 2018–19

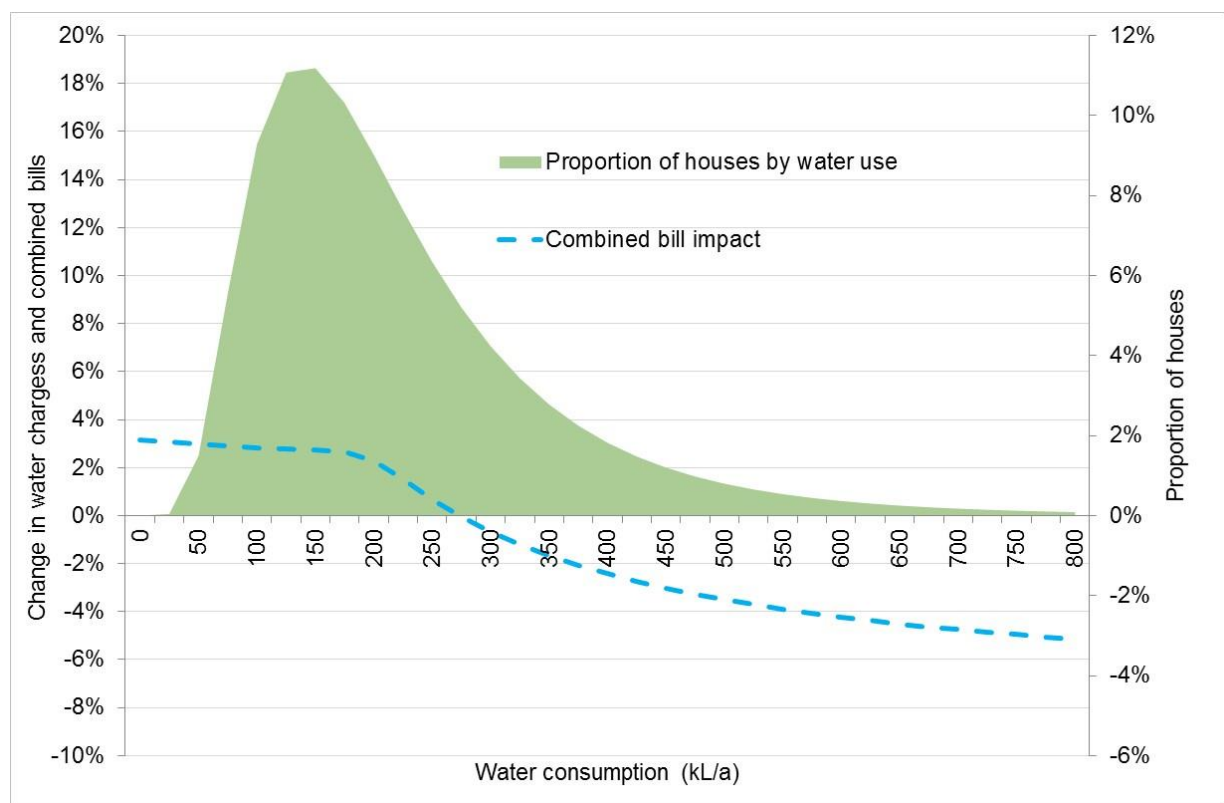
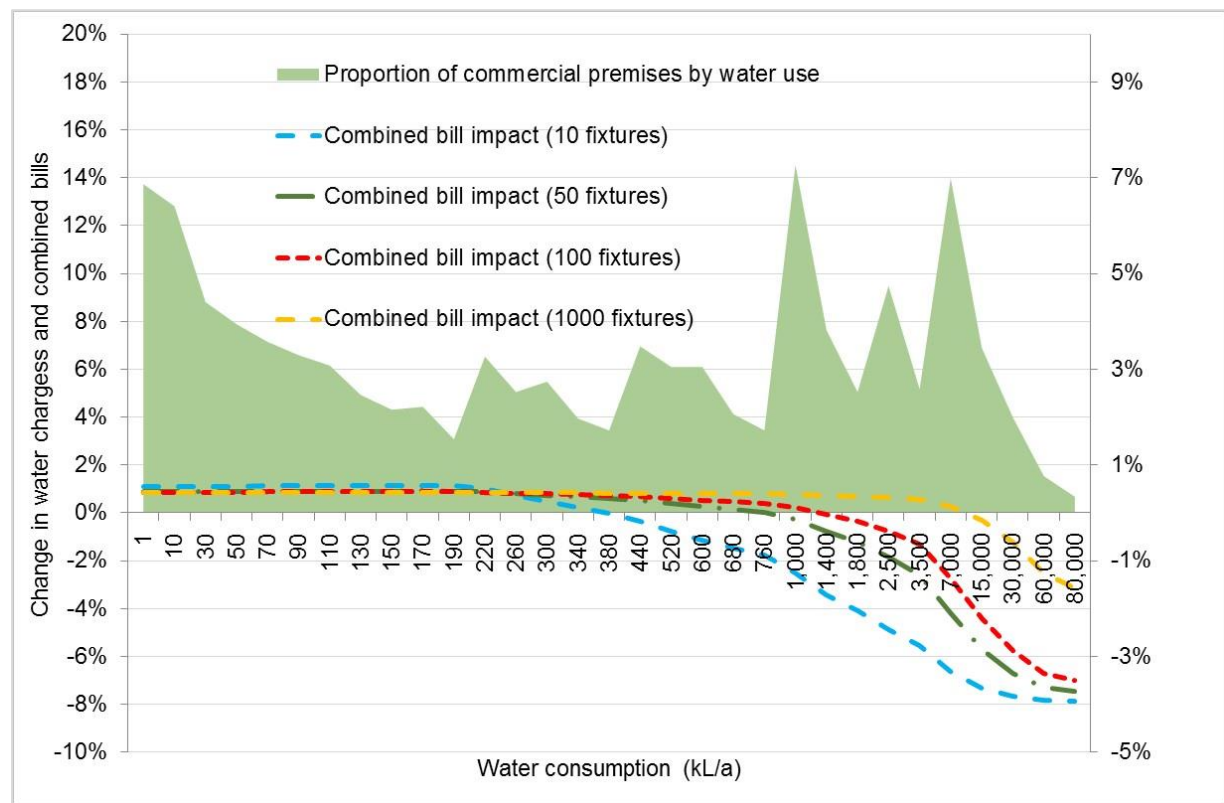


Figure 10: Commercial customer impact, 2017–18 to 2018–19



Maintaining our financial viability

Icon Water's ongoing financial viability underpins our ability to continue providing a quality, reliable and value for money service to the ACT community.

We are wholly owned by the ACT Government and have two voting shareholders: the Chief Minister and the Minister for the Environment and Heritage of the ACT. As a territory-owned corporation, we are required to ensure that the ACT's investment in water and sewerage infrastructure provides sustainable financial returns to our shareholders.

Our 2018 price proposal deals with a number of matters that will have a direct impact on our financial performance.

Return on equity

As discussed in the section on [Keeping our costs down](#), the return on equity component of the weighted average cost of capital provides a return to the shareholder for their equity investment in our business.

Our proposed return on equity is 7.71 per cent, calculated using the Industry Panel's approach.

Revenue recovery

The ability for us to recover our allowed revenues – which are based on prudent and efficient costs – from our customers in a timely fashion over the 2018–23 period is critical to ensuring our ongoing financial viability. Our proposal for an unders and overs arrangement in the annual price reset process, discussed in the section on [Our proposed regulatory framework](#), will go a long way towards this goal.

Key financial ratios

Table 9 shows the estimated impact of our price proposal over the 2018–23 regulatory period on a number of financial ratios. The ratios are modelled on the assumption that Icon Water recovers its allowed revenues.

Icon Water satisfies each of the minimum financial ratio targets as specified by the Industry Panel. Based on this assessment, Icon Water's proposed price path is consistent with Icon Water remaining financially viable and being able to continue to operate, maintain, renew and develop the assets required to deliver services.

Table 9: Modelled key financial ratios

	Target	2018–19	2019–20	2020–21	2021–22	2022–23
FFO interest cover (ability to make interest payments)	>1.8 (higher is better)	2.37	2.48	2.55	2.56	2.61
Net debt to RAB (ability to repay debt)	<85% (lower is better)	53%	50%	50%	49%	50%
FFO to net debt (debt servicing ability)	>6% (higher is better)	6.6%	7.2%	7.5%	7.4%	7.5%
Retained cash flow to capex (ability to finance capex after paying dividends)	>0.5 (higher is better)	0.5	0.6	0.6	0.7	0.9

Bringing it all together

In conclusion, the key outcome of Icon Water's 2018 price proposal is continued provision of safe, reliable and quality service with fair and affordable pricing.

Along with a measured and gradual rebalancing of our water tariff and the introduction of a fairer way to fund brownfield infrastructure upgrades, our proposal would see the combined water and sewerage bill of a typical residential customer rise at or below the rate of forecast inflation for each year from 2018–19.

Our proposal has been informed by extensive consultation and is in line with the key priorities identified by our customers.

In proposing a price path in line with inflation while maintaining our service performance, we have overcome upward pressure on prices from several quarters. This includes dealing with the fact that our water prices are currently set too low to enable us to recover our allowed revenue, the result of water sales forecasts being set too high at the 2015 review. We are also facing the prospect of some costs outside of our control rising over the next regulatory period, such as electricity prices.

We have met these challenges by putting substantial effort into further improving our asset management and business practices to find significant ongoing reductions in our operating and maintenance costs.

We are also proposing a sensible, rigorously assessed capex program for the 2018–23 regulatory period. This program focusses on renewing ageing infrastructure to allow us to continue to meet our service standards.

Our efforts in reducing costs are reflected in the significant reductions we are proposing in water (12 per cent) and sewerage (10 per cent) revenue for 2018–19, compared to the final year of the 2013–18 regulatory period.



