

2018 Price Submission

A submission for water and sewerage pricing for the 2018-23 regulatory period





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South East Water proudly acknowledges our region's Aboriginal communities and their rich culture and pays respect to their Elders past and present.

We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely. We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

At a glance



This submission proposes South East Water's five-year approach to ensuring that our business decisions best reflect our customers' priorities and delivers what they value most.

Key out-takes are highlighted below, each underpinned by our ongoing commitment to deliver healthy water for life.



Comprehensive communication and engagement

We communicated with 750,000+ customers and stakeholders, with 5,690+ directly involved in our 14 month engagement program.



Customer-driven outcomes

We identified five key outcomes that our customers value most, informing our approach for the next regulatory period. To deliver these the majority of output measures will either improve or remain ahead of industry average.



Higher cost efficiency targets

In the context of an already highly efficient business, we're proposing an average operating cost efficiency target of 2.3%. This is on top of capital program savings in the order of \$110M.



Less risk to customers

Accepting and managing greater risk on behalf of our customers is a key way we're proposing to lower prices.



Lower bills

On average, we're proposing to reduce customer bills by 7.3% (in real terms).



Ongoing accountability

We'll report against our outcomes to our customers each quarter throughout the next regulatory period, tracking our progress.



Commitment to deliver

Our executive team and Board of Directors were involved in this submission every step of the way, driving us to find more value for our customers. Their attestation of this submission reflects this.



Clear and transparent justification

From how we've engaged with our customers to how we've set prices – and everything that happens in between – we've provided thorough evidence and sound reasoning to support our proposal.

Executive summary

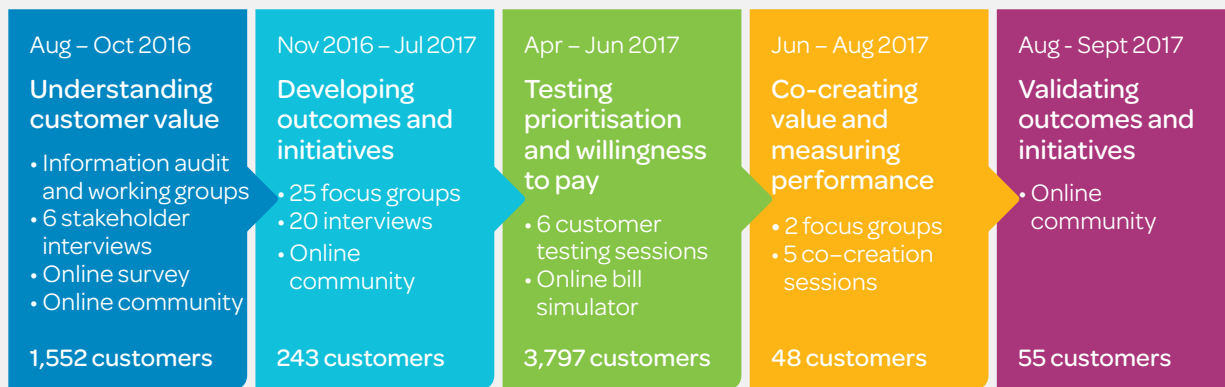
This price submission for the 2018-23 regulatory period has been developed through extensive engagement with our customers and is centred on the following five key outcomes they most value and expect:

- Get the basics right, always
- Warn me, inform me
- Fair and affordable for all
- Make my experience better
- Support my community, protect our environment.

Our engagement approach

To determine these outcomes, we developed and implemented a robust Customer Engagement Program. It's overarching purpose was to ensure that our business decisions best reflect our customers' priorities and deliver what they value.

This program builds on our existing business-as-usual engagement practices and their resulting insights and analysis and encompassed five key phases.



Our engagement was overseen by an independent Customer Engagement Council and supported through our 'Have your say' communications program.

Moving into this next regulatory period, it is our intention to build transparency and a stronger sense of the value we provide during each and every interaction with our customers. We also commit to ongoing engagement with our customers, so that we can co-design our key initiatives with them to better deliver on their expectations.



An example of our 'Have your say' communication program.

Our five customer outcomes



1. Get the basics right, always

Safe and reliable services are the most critical priorities when it comes to delivering value for our customers. They've told us it's important that we maintain current high levels of service and that as experts in our field, they trust and expect us to continuously innovate and improve. We propose to continue finding more efficient ways to deliver the essential services our customers expect.



2. Warn me, inform me

While fixing supply interruptions is important to our customers, so is how we warn them or keep them informed when there is a disruption. We propose to keep finding new ways to minimise customer impacts from network disruptions using a real-time website, SMS alerts and advanced network monitoring and analytics to identify events earlier. We propose to couple this with better scheduling of works, notifications and direct monitoring of customer disruption levels to guide ongoing improvements.



3. Fair and affordable for all

Given the essential nature of the services we provide, customers expect that our services and charges are fair for all. Many are concerned about bill certainty, control and affordability, however willingness to pay to increase investment to support vulnerable customers is low. We propose to deliver fair and affordable services through an ongoing focus on efficiency in how we deliver all customer outcomes, combined with leveraging the benefits of digitisation and continuous improvement across our vulnerable customer program.



4. Make my experience better

Customers are unwilling to pay more for an improved service experience – they simply expect it. To deliver value efficiently, we propose to better understand customer experiences and needs across various segments, and to focus on resolving contacts the first time by more effectively managing and consolidating customer data and interactions. We propose to increase education around existing services and the value we provide to drive awareness and uptake of preferred channels and to improve value perceptions.



5. Support my community, protect our environment






Customers place importance on us ensuring long-term water security while also protecting the bay and minimising our impact on the environment. To enhance water availability and create more liveable communities, we propose expanding the delivery of urban water recycling, investigating transformational agricultural water recycling opportunities, and providing water efficient education to our community. We also propose to reduce our carbon emissions and to mitigate sewer spills through advanced network monitoring.



Output measures

Key measures and programs have been identified under each outcome to ensure we deliver on our customers' expectations. Some targets we propose to improve upon, while other targets we propose to maintain at performance levels consistent with customer expectations. The following table provides a summary of the key measures we plan to focus on for the next regulatory period.

Table 1 Proposed output measures and targets

Outcomes	Output measures	Current performance	2022-23 Target
 <p>1. Get the basics right, always</p>	Percentage compliance with drinking water and recycled water standards	100%	100%
	Number of water quality complaints per 100 customers	0.18	0.18
	Number of customers receiving greater than 5 unplanned water supply interruptions	532	532
	Number of customers receiving 3 or more sewerage blockages	17	17
 <p>2. Warn me, inform me</p>	Percentage of customers notified per unplanned interruptions (for customers who have given us email/mobile details)	60%	80%
	Average duration of unplanned water supply interruptions	88 minutes	88 minutes
	Percentage of customers impacted by unplanned water supply interruption in peak times	28.1%	27.6%
	Percentage of planned water interruptions restored within notification period	98%	98%
 <p>3. Fair and affordable for all</p>	Operating cost per property	\$161	\$147
	Number of customers supported by South East Water Assist program	4,557	7,147
	Average level of debt upon entry to South East Water Assist program	\$925	\$800
 <p>4. Make my experience better</p>	Customer satisfaction – rating of 6 or above out of 10	81%	85%
	Value for money - rating of 6 or above out of 10	New measure	Committed to develop target by 2018-19
	Total complaints per 100 customers	0.43	0.37
 <p>5. Support my community, protect our environment</p>	Total net CO ₂ emissions	41,774	29,690
	Number of significant sewage spills (dry weather)	20	20
	Percentage of customers in greenfield areas receiving recycled water	47%	77%
	Volume of alternative water as a percentage of total water used in designated greenfield areas	12%	20%

Demand forecasts

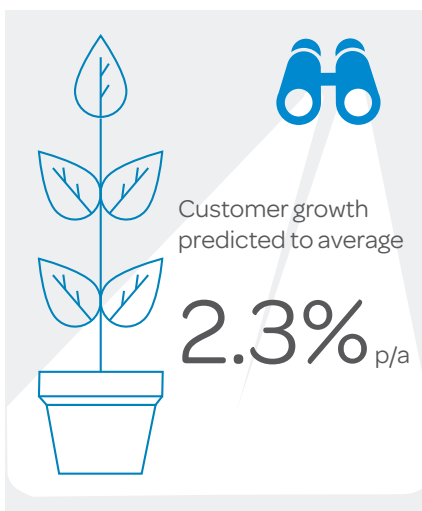
Demand forecasts for this submission are driven by the latest assumptions about current and future residential and business water usage, which results in total water sales forecast to increase by one per cent each year during the next regulatory period. This increase reflects the take up of more water efficient appliances, increased use of alternative water and smaller garden sizes.

Customer growth is projected to be on average 2.3 per cent a year during the next regulatory period. We have undertaken a more detailed customer growth analysis specific to our service area, which results in higher growth projections than expected by the Essential Services Commission (ESC) – resulting in lower prices for customers.

This approach supports an advanced rating under the ‘Risk’ and ‘Management’ categories of PREMO.

Operating expenditure forecasts

We developed our operating expenditure forecasts based on 2016-17 actual expenditure – and then projected forward to account for customer growth and targeted levels of cost efficiency aligned to the above customer growth of 2.3 per cent on average during the next regulatory period.



We propose to reduce our operating costs per property from current levels by nine per cent during the period. The ‘Operating expenditure forecast’ section provides further detail on our approach and commitment to efficiency.

We consider that this proposed level of cost efficiency supports an advanced rating under the ‘Risk’ and ‘Management’ categories of PREMO.

Additionally we are seeking to recover costs for a small number of step changes, which have been identified as either new regulatory requirements or resulting from major capital programs:

- Additional operating and maintenance costs to service Aquarevo, which will be offset by projected asset sales
- New regulatory security requirements for information technology (IT)
- Operating costs associated with upgrades already underway at our Lang Lang and Boneo water recycling plants.

Capital expenditure forecasts

Capital expenditure forecasts for this submission are broadly based on:

- a number of major capital projects that predominately cater for customer growth, including the upgrade of our Boneo Water Recycling Plant and a number of sewer projects to cater for new development
- key programs to deliver on customer outcomes including water mains renewals, water and sewerage network and water recycling plant upgrades to cater for growth requirements, backlog connections, ongoing IT requirements, and our Climate Mitigation Program.

During the next regulatory period, we will ensure that proposed works are prudent and efficient through our asset management planning process. Where appropriate we have challenged the level of service we provide, prioritised works and deferred projects out of the period. Subsequent to our asset management planning process we will also assume \$110 million of capital expenditure risk on behalf of our customers and ensure that our Capital Expenditure Program is weighted firmly in their favour.

This approach we consider supports an ‘Advanced’ rating under the ‘Risk’ and ‘Management’ categories of PREMO.

PREMO self-assessment

Our self-assessment for this submission is at an ‘Advanced’ PREMO rating based on the following.

Outcomes

Alignment of our proposed outcomes, outputs and programs to meet customer expectations and with targets that are either increasing or are being maintained at an above industry average performance level.

Management

Material level of cost efficiency built into operating and capital expenditure forecasts.

Engagement

Comprehensive Customer Engagement Program that strongly aligns customer preferences to the submission’s outcomes.

Risk

Approach to setting demand, operating expenditure and capital expenditure that significantly allocates risk to South East Water to lower prices for customers.

Attestation and governance arrangements

In fulfilling the attestation requirements of the ESC, South East Water leveraged its existing, robust governance arrangements while also developing a standalone attestation framework especially for the 2018 Price Submission. Our bespoke attestation framework sought to actively engage and involve executive management and the board on the key activities and strategic decision points of the submission as well as provide a high degree of comfort around its assumptions and content. As an additional assurance measure, we engaged KPMG to provide an independent review over the

material aspects of our submission. Our Chair and Managing Director’s attestation is provided in Appendix 1.

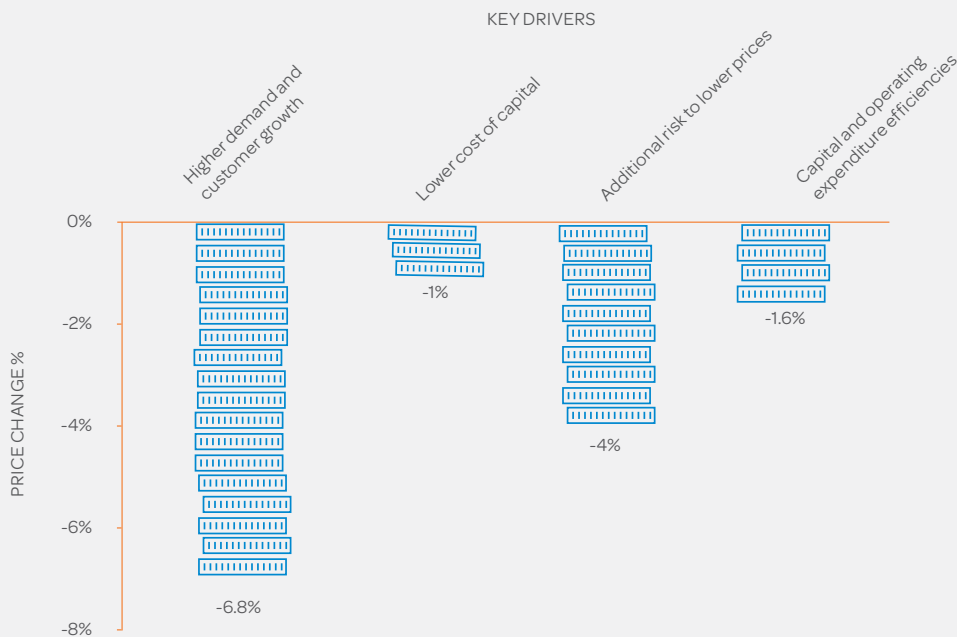
Prices and customer impacts

Based on our projections for demand forecasts, capital and operating expenditure and an ‘Advanced’ PREMO rating, **prices on average are forecast to be reduced** by 13.4 per cent in 2018-19. The key drivers of this average price reduction is broken down in the figure below.

In adjusting prices we also propose revising our current tariff structures to better deliver on customer expectations, with specific focus on fairness and affordability, bill control and simplicity. Key tariff structure changes include:

- Reducing water usage charges from three to two steps to balance affordability for large households, making the charges simpler, and still providing some reward for saving water
- Reducing the sewage disposal charge for residential customers to 50 per cent of the current rate to make the charges simpler and reduce the impact on bills associated with increased water usage in warmer periods or when customers have a leak
- Reducing recycled water usage charges to 80 per cent of Step 1 and removing the annual service charge of \$24 a year to provide those customers with a greater incentive to use alternative water.

Fig1 Breakdown of 2018-19 price reduction



The table below shows a sample of customer bill impacts resulting from the proposed 2018-19 price change, excluding the impacts of the Government Water Rebate.

Table 2 Sample of customer bills – impact of price change for 2018-19 (excluding Government Water Rebate)

	Usage (kL)	2017-18 bill \$	2018-19 bill \$	\$ change	% change
Owner occupier – small user (apartment w/ 1-2 occupants)	90	\$872	\$756	-\$116	-13.3%
Owner occupier – average user (detached dwelling w/ 3 occupants)	150	\$1,117	\$943	-\$174	-15.6%
Owner occupier – large user (5 occupants; small garden)	350	\$2,059	\$1,688	-\$371	-18.0%
Tenant – small user (apartment w/ 1-2 occupants)	90	\$367	\$279	-\$87	-23.8%
Tenant – average user (detached dwelling w/ 2 occupants)	112	\$456	\$348	-\$109	-23.8%
Tenant – large user (5 occupants; small garden)	350	\$1,554	\$1,211	-\$343	-22.1%
Average business customer	460	\$2,845	\$2,685	-\$160	-5.6%

When incorporating both the 2018-19 price reduction and removal of the Government Water Rebate, the **average residential customer** who uses 150 kL of water a year, will see a 7.3 per cent real bill reduction in 2018-19 (excluding CPI).

For **business customers**, water and sewerage prices are proposed to reduce by 5.6 per cent in 2018-19 with CPI adjustments in the remaining years, while no real

price change has been proposed for trade waste charges.

While we propose to reduce prices from 2018-19, the end of the \$100 Government Water Rebate will result in some customers experiencing a small bill increase. In adjusting prices in 2018-19 we have sought to mitigate bill increases while also balancing customer preferences to maintain the current balance of fixed and variable charges.

To further to ease the transition from the Government Water Rebate, prior to the implementation of 2018-19 prices, we will explore options to provide additional financial support for vulnerable customers who will experience a bill increase, particularly small usage tenants who are concession card holders. South East Water will fund a transitional rebate to ensure no concession card holder tenants will experience a real bill increase.

Table 3 Sample of customer bills – impact of price change and removal of the Government Water Rebate for 2018-19 (\$ 1 January 2018 dollars)

	Usage (kL)	2017-18 bill \$	2018-19 bill \$	\$ change	% change
Owner occupier – small user (apartment w/ 1-2 occupants)	90	\$772	\$756	-\$16	-2.1%
Owner occupier – average user (detached dwelling w/ 3 occupants)	150	\$1,017	\$943	-\$74	-7.3%
Owner occupier – large user (5 occupants; small garden)	350	\$1,959	\$1,688	-\$271	-13.8%
Tenant – small user (apartment w/ 1-2 occupants)	90	\$267	\$279	\$13	4.7%
Tenant – average user (detached dwelling w/ 2 occupants)	112	\$356	\$348	-\$9	-2.5%
Tenant – large user (5 occupants; small garden)	350	\$1,454	\$1,211	-\$243	-16.7%
Average business customer	460	\$2,845	\$2,685	-\$160	-5.6%

Engaging with our customers

Background to our engagement approach

Our engagement approach for this submission builds on customer insights gained through our business-as-usual practices.

Since 2012, our Customer Experience Program has been the largest component of our customer engagement framework. This program provides relevant, timely and ongoing insight into our service experiences and tracks levels of satisfaction and value. Since it began, more than

75,000 customers (representing an eight per cent response rate) have evaluated their service experience across traditional and digital channels via phone, mail and online surveys.

These insights have been used to drive improvements in our operational processes and performance and have driven the development of new service offerings. The mySouthEastWater app, new eBill solution, paper bill redesign, SouthEastWater LIVE, Report a Leak online and digital notifications for planned and emergency works were all developed to address customer

feedback provided through the Customer Experience Program.

We also use complaints as an opportunity to improve our services. We've analysed more than 15,590 complaints since 2012, including Energy and Water Ombudsman Victoria and Ministerial complaints. These insights combined with those from our Customer Experience Program, helped identify key themes and opportunities that we've explored further to better manage customer expectations. This includes themes around affordability and vulnerability, high water usage, water quality, service charges and billing.

Customer Engagement Program

Our approach

Our program for this submission builds on our existing business-as-usual engagement practices and their resulting insights and analysis. All of which identified our challenge in shifting customers' perceptions

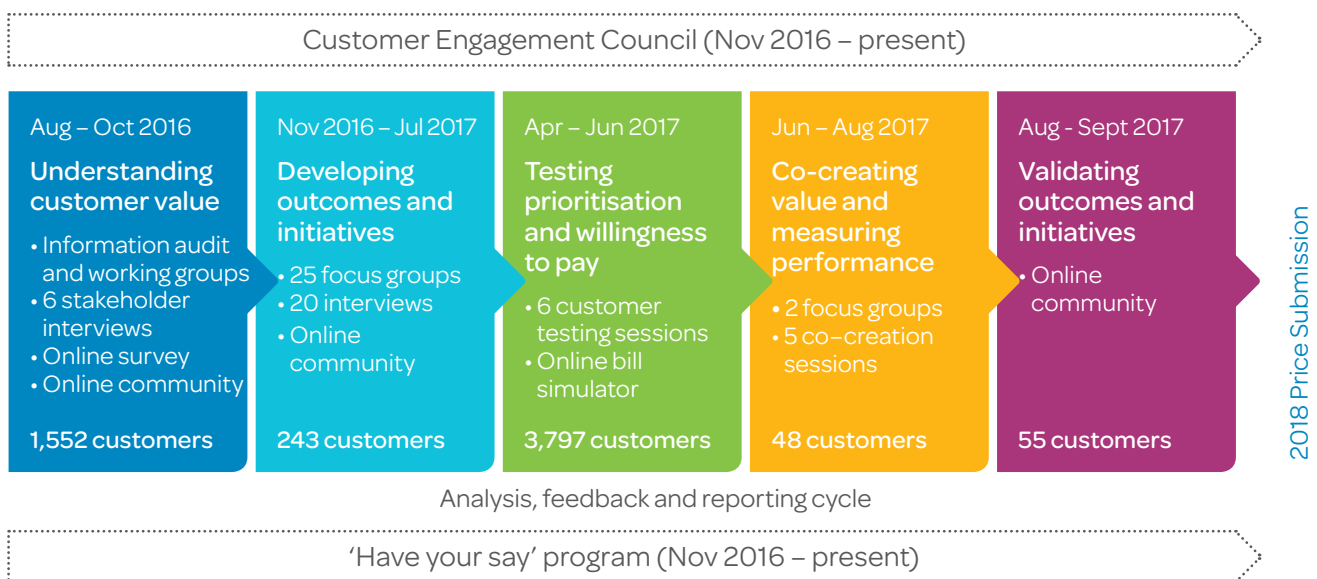
of value. To overcome this we needed to better understand customer value and what drives it and this led to the overarching outcome for our Customer Engagement Program:

Ensure that our business decisions best reflect our customers' priorities and deliver what they value.

Together with customer research and engagement firm, GfK, we developed a phased engagement program to ensure our customers had ample opportunity to participate and have their say on the services we provide and what they pay for these.

Our Customer Engagement Program encompassed five key phases and is outlined below.

Fig 2 Our Customer Engagement Program



Each phase was designed to deliver on a pre-determined set of agreed objectives through appropriately selected qualitative and/or quantitative methods. These methods, which range from deliberative online communities and focus groups through to surveys and an online bill simulator, helped to ensure that we engaged customers in a timely and relevant manner to best inform the outcomes and initiatives for this submission.

Additionally, a cycle of analysis, feedback and reporting at the end of each phase helped inform, shape and evolve the subsequent phases.

The robustness of our program was overseen and challenged by our Customer Engagement Council (CEC) – an independent panel of multicultural, policy development, regulatory and customer advocacy experts.

It was also supported by 'Have your say', a communications program designed to drive customer

awareness, participation and education to help inform this submission.

This communications program was one way we elicited involvement in and responses to our bill simulator, an online tool that allowed customers to choose whether to reduce, increase or maintain prices for specific initiatives. This tool delivered one of our highest customer engagements, with 3,791 customers completing it and telling us how much they want to pay, or not pay, for services.

"Our team... have been following with much interest your use of the bill simulator. The results you have achieved for participation and response has been outstanding, and to date is the largest response our program has ever had. I know this is a real testament to the engagement and communication you have done with your stakeholders." – Catherine Millett, Communications Manager for Delib (producer of the bill simulator software)

Our audience

Residential customers

Residential customers comprise 92 per cent of our customer base and drive 73 per cent of our revenue. Therefore, developing a better understanding of this segment was heavily weighted in our engagement approach.

Throughout the course of our engagement we adopted a range of communication approaches to ensure that all residential customers, irrespective of their cultural and circumstantial diversity, had a chance to have their say on the services we provide and the prices we charge.

Business customers

While business customers represent a smaller proportion of our customer base, developers and real estate agents, large commercial customers and local councils have highly complex and evolving needs and challenges that drive their expectations of South East Water. They also have significant influence and impact on the broader communities we serve.

During this process we sought to better understand the needs and expectations of these customers and we'll explore these further during the next regulatory period.

Our employees

We engaged with our 500 plus employees, 90 per cent of whom are also South East Water customers, to leverage their wealth of customer knowledge and insights.

Our community

We also invited the broader community and general public to participate in our engagement, through various communication channels and initiatives such as community events.

Scope and level of influence

Our Customer Engagement Program was designed to:

- capture the breadth and diversity of our customer base
- value our customers' time and provide them with control over when and how they want to engage and what they want to engage about
- provide safe and inclusive engagement avenues for customers to speak openly and freely
- incorporate qualitative and quantitative methods to ensure depth and statistical significance
- be cost-effective, sustainable and meaningful in delivering on our overarching outcome.

As a business we agreed that the following elements be excluded from the scope of our engagement:

- Financial efficiency targets i.e. operational expenditure and capital expenditure
- Weighted Average Cost of Capital
- Government policy and regulatory requirements
- People-related decisions i.e. safety and employment.

Under the International Association of Public Participation Spectrum (IAP2) our engagement approach is identified as traditional and organisation-led. We have developed and led the engagement for this submission, and defined as a business the levels of influence and participation our customers have had. We are responsible for the degree to which their engagement is reflected in the outcomes and outputs of this submission and are confident we have done this effectively and transparently.

To ensure wider, broader and deeper levels of engagement for this submission we designed a fit-for-purpose engagement program that moves away from the inform/consult level used on specific components of our previous submission to one of involve/collaborate across most



Engaging with customers at Victoria's Multicultural festival, Federation Square, 2017.

submission components. The form, content and timing of our engagement program positions it towards the outer edges of the ESC's engagement triangle.

During the planning and initial engagement phases for this submission, we empowered residential and business customers to define what value means to them and prioritise the elements that drive it. We used this information as a basis to involve and collaborate with them further in how we could deliver on their key priorities. By engaging our customers earlier we've been able to broaden their level of participation, deep dive on elements where required and enable customers to have greater influence and impact across our whole submission.

We were also deliberate in the levels of instruction and information provided to customers during engagement phases so as not to lead or influence their thinking, creativity or decision making processes. Little or no information was provided in earlier engagement phases where we wanted to empower customers to define and prioritise value or be best positioned to innovate and create initiatives to deliver on this. As we progressed through our engagement, greater levels of information and learnings were shared with customers for discussion and to enable more effective engagement.

Focus groups were given stimulus material or findings from previous engagement phases where appropriate to drive discussions or enable deep diving. Co-creation workshop participants exploring more complex or specific issues such as tariffs, charges and guaranteed service levels were provided stimulus material and even pre-reading or activities in some instances to prepare them for topics being discussed. They were also given context by employees in attendance and were able to ask questions or clarify items as needed. Our online communities were also given activities and stimulus material or previous engagement findings to explore and deliberate. All stimulus material, information, instructions provided, online transcripts and footage of sessions conducted are available to the ESC on request.





Development of customer outcomes

The following summary table outlines the key findings from each engagement phase and how our customer outcomes evolved through the process. Further detailed findings are outlined under each customer outcome section and our approach for each phase is also detailed in Appendix 3. Detailed reports are available to the ESC upon request.

Table 4 Summary of customer engagement findings

	The basics	Customer			Environment and community
Understanding customer value	<ul style="list-style-type: none"> Safe and clear water customers can rely on Sewage is taken away and treated safely Focus on operational efficiency 	<ul style="list-style-type: none"> Responsiveness to faults and emergencies Information and control around disruptions 	<ul style="list-style-type: none"> Operationally efficient to keep bills down Clarity of billing and avoidance of bill shock Water saving efforts are recognised and rewarded 	<ul style="list-style-type: none"> Responsiveness to service enquiries and issues Information and control to minimise time and effort Value for money from service experience 	<ul style="list-style-type: none"> Caring for the environment Always there, now and in the future
Developing outcomes and initiatives	<ul style="list-style-type: none"> Support for maintaining basic service levels Support for early replacement of pipes on roads that could cause major disruption 	<ul style="list-style-type: none"> Rectification more important than response times to unplanned interruptions Understand times and individual circumstances to minimise disruption Keep customers warned and informed 	<ul style="list-style-type: none"> Services need to be efficient and affordable Real-time information, alerts, notifications, minimise leaks Hardship and vulnerable customer support 	<ul style="list-style-type: none"> Improve customer response times and first contact resolution Raise awareness of service options Understand different segment service needs i.e. transactional, relationship, partnership 	<ul style="list-style-type: none"> Alternative water supply Urban recycled water efficiency programs and education Climate change mitigation Sewage spill mitigation to protect Port Phillip Bay Supplying recycled water for agricultural use
Prioritisation and willingness to pay	<ul style="list-style-type: none"> Getting the basics right is the top priority 50% support additional funding to maintain or improve current levels of renewals 	<ul style="list-style-type: none"> More than 30% were willing to pay for support expanded fault management 	<ul style="list-style-type: none"> 34% prefer no increase 46% believe we charge a fair price for water More than 30% support funding for digital metering More than 40% support bill savings by changing to eBills and direct debit Low support for those in need with preference for better awareness and communication of current offerings 	<ul style="list-style-type: none"> 51% believe we offer good value for money Little support for increasing investment in customer services (although feedback suggests improved services are expected) 	<ul style="list-style-type: none"> Believe we should focus on being environmentally responsible as well as give back to the community Expect water efficiency support with little willingness (20%) to pay for increasing current options More than 30% support investment to deliver increased alternative water for farmers 1 in 4 support expansion of the Recycled Water Program 36% support additional funding to reduce spills in the sewer network (second highest priority)

Table 4 Summary of customer engagement findings *continued*

Co-creating value and measuring performance	The basics	Customer			Environment and community
<ul style="list-style-type: none"> > Support maintaining minimum service levels and current payments > Prefer incremental payments per interruption, instead of a one-off payment > Value acknowledgement of fault 	<ul style="list-style-type: none"> > Support maintaining minimum service levels > Want better understanding of what happens with internal sewer spills i.e. what do we do now? 	<ul style="list-style-type: none"> > Want wording of existing guaranteed service level (GSL) for restrictions simplified so it's easier to understand > Demonstrated strong preferences in testing tariff structure options for fairness, certainty, reward and recognition for saving water and paying on time, control and simplicity (as long as transparency is maintained) 	<ul style="list-style-type: none"> > Would value a set of basic customer service promises 	<ul style="list-style-type: none"> > Unanimous support for a community GSL for impacts on bays and waterways > Would value basic service commitments not linked to money 	
Validating outcomes and initiatives	 <p>1. Get the basics right, always</p> <ul style="list-style-type: none"> > Maintain water quality > Maintain water and sewerage reliability > Operationally efficient 	 <p>2. Warn me, inform me</p> <ul style="list-style-type: none"> > Rectify interruptions to minimise disruption > Reduce disruption in peak times > Understand individual needs and impacts > Keep customer informed and in control 	 <p>3. Fair and affordable for all</p> <ul style="list-style-type: none"> > Keep costs down > Provide greater bill certainty and control > Digitisation to deliver customer benefits > Awareness and access for those in need > Tariff structures adjusted to balance customer preferences 	 <p>4. Make my experience better</p> <ul style="list-style-type: none"> > Improve first contact resolution and reduce effort > Increase choice, awareness and value perceptions > Better understand individual needs 	 <p>5. Support my community, protect our environment</p> <ul style="list-style-type: none"> > Reduce our carbon emissions > Create a water efficient community > Minimise our spills to the environment

Customer Engagement Council

Established in November 2016, a seven member independent Customer Engagement Council (CEC) was engaged to ensure our customers' needs and expectations were effectively and transparently reflected within South East Water's strategic business decision making – specifically in reference to the development of this submission.

All phases of our Customer Engagement Program and the analysis, feedback and reporting cycle was overseen and challenged by this council.

Members were recruited for their thought leadership, expertise and/or their ability to represent the interests of the diverse customers and community we serve. The CEC currently convenes bi-monthly.

CEC members

Mr David Heeps (Chair)
Previously Chief Executive Officer of the Essential Services Commission (ESC)

Mr Liam Smith
Director at BehaviourWorks, Monash University

Mr Maxwell Shifman
Chief Operating Officer, Intrapac Property

Mr Gerard Brody
Chief Executive Officer, Consumer Action Law Centre

Mr Jon Onley
Membership Manager, Australian Industry Group

Dr. Sundram Sivamalai
Previously Commissioner and now board member, Ethnic Communities Council of Victoria

Ms Petrina Dorrington
Former Acting Executive Director, Consumer Utility Advocacy Centre (CUAC) and the Consumer Policy Research Centre at Macquarie University (*resigned May 2017*)

The CEC has provided critical insight and guidance that has shaped our approach to ensure its robustness and effectiveness in translating and reflecting our customers' priorities and what they value in this submission. Its letter of support for our approach and terms of reference is in Appendix 2.

The CEC has also been instrumental in ensuring that a strong communications program underpinned our engagement approach to provide transparency and drive participation, access and uptake for the various engagement phases and methods adopted. It has challenged, influenced and advised on a number of our engagement and submission elements which led to:

- changes and enhancements to the phases of our program
- changes to question wording, explanation and user experience for our bill simulator to increase participation
- significant transformation and expansion of the efforts and ongoing focus of our 'Have your say' communications program.

'Have your say' communications program

Our 'Have your say' communications program has underpinned our Customer Engagement Program since it launched in November 2016, providing a variety of channels and platforms for our customers and the broader community to have their say about our services and prices. It will also facilitate ongoing engagement with our customers to enable continued information sharing, participation

and commentary (including ways of communicating our performance against outcome commitments outlined in this submission).

The program, which included an online platform through OurSay, has driven significant awareness and understanding about our engagement activities and has helped achieve the breadth and diversity of participation we were seeking.

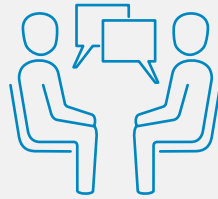
As our customers prefer to communicate with us in different ways, we ensured that our efforts supported both offline and online channels.

"We have reviewed a number of customer engagement approaches across the water industry including some clients who work with us and some who do not. South East Water has taken a considered and meaningful approach to engaging its customers using both digital and traditional approaches. This will not only support customer buy-in for its water pricing submission, but also for ongoing engagement throughout the year." – Eyal Halamish, OurSay CEO and customer engagement expert

Offline engagement

To ensure all customers had an opportunity to participate in our engagement, we sent out 'Have your say' invitations on more than two million bill envelopes and 800,000 fourth quarter paper and eBills. Customers interacting with our contact centre were invited to have their say or receive an SMS with a link to do so online. To engage with our culturally and linguistically diverse customers, we formulated an Easy English guide on how to 'have your say' and supplemented this with advertisements in non-English speaking newspapers targeting common languages spoken in our service region.

Fig 3 'Have your say' offline communications



1,500
promotional cards distributed to passengers at train stations and placed in libraries

Cranbourne Star local newspaper article

31,400+
circulation



Banner message at the bottom of letters sent to customers

3
advertisements in non-English speaking newspapers (*Viet Times, Neos Kosmos, Chinese Pacific Daily*)

2,000,000
envelopes sent to customers with their bills between April – September 2017

3AW radio interview about price submission

300,000
listeners

1,800 SMS
sent to tenants and owner occupier customers

'On-hold' recorded message for customers calling our property information line

800,000
4th quarter bills included 'Have your say' message

5,000
postcards mailed to customers in Mentone, Parkdale and Mordialloc

1,500
Easy English guides distributed to community service providers for culturally and linguistically diverse customers

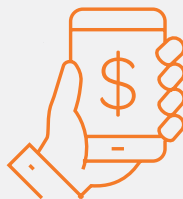
3
community events to distribute Easy English guide and postcards promoting 'Have your say': Pakenham Agricultural Show, Day at the Melbourne Zoo, Multicultural Festival at Federation Square

Online engagement

Our online communications plan was tailored for our customers' increasing demands for digitised services and engagement. To do this we partnered with OurSay to build our own collaborative platform for customers to connect, share views, ask questions and engage with us about services and prices at yoursay.southeastwater.com.au. More than 6,750 people have visited the site.

Fig 4 'Have your say' online communications

BILL SIMULATOR
3,791
responses



OTHER
Pop-up polls through South East Water website

All employee email signatures promoted 'Have your say'

'HAVE YOUR SAY' WEBSITE
as at 30 July 2017
500+
poll responses

160+
comments/questions posted in forums

6,750+
unique visitors



SOCIAL MEDIA
as at 30 July 2017
6 Facebook ads
18 Facebook posts

248,000+
Facebook views

28
Twitter posts



32,000+
view of Twitter polls and tweets

10
LinkedIn posts to engage key stakeholders and non-residential customers

Ongoing customer engagement

Throughout our Customer Engagement Program, we've learnt that the levels of engagement expected from our customers and community are evolving. For a program to be effective:

- it needs to be a continuous process and not 'point-in-time'. This was demonstrated by our engagement findings that showed material shifts in engagement levels can incite confusion, frustration and a decline in customer value perceptions.
- methodologies need to be customised to achieve the outcomes being sought and to capture the breadth and diversity of our customers.

Given the participation rates and outcomes achieved through our online engagement methods, we will continue to use these as part of

our ongoing approach. We will seek to use similar online communities so that passive and active customer segments can help us develop key services and programs.

We'll also continue to maintain and evolve our 'Have your say' platform with OurSay to provide ongoing means for customer collaboration and engagement. It will also be a key way we can report on our performance against our customer outcomes.

Ensuring effective communication of our performance and ongoing engagement with customers will be part of a revised remit for our CEC. It will also be key to helping us establish measures that track the effectiveness, diversity and efficiency (return on investment) of our engagement.

Our existing Customer Experience Program will be expanded to cover more digital channels and

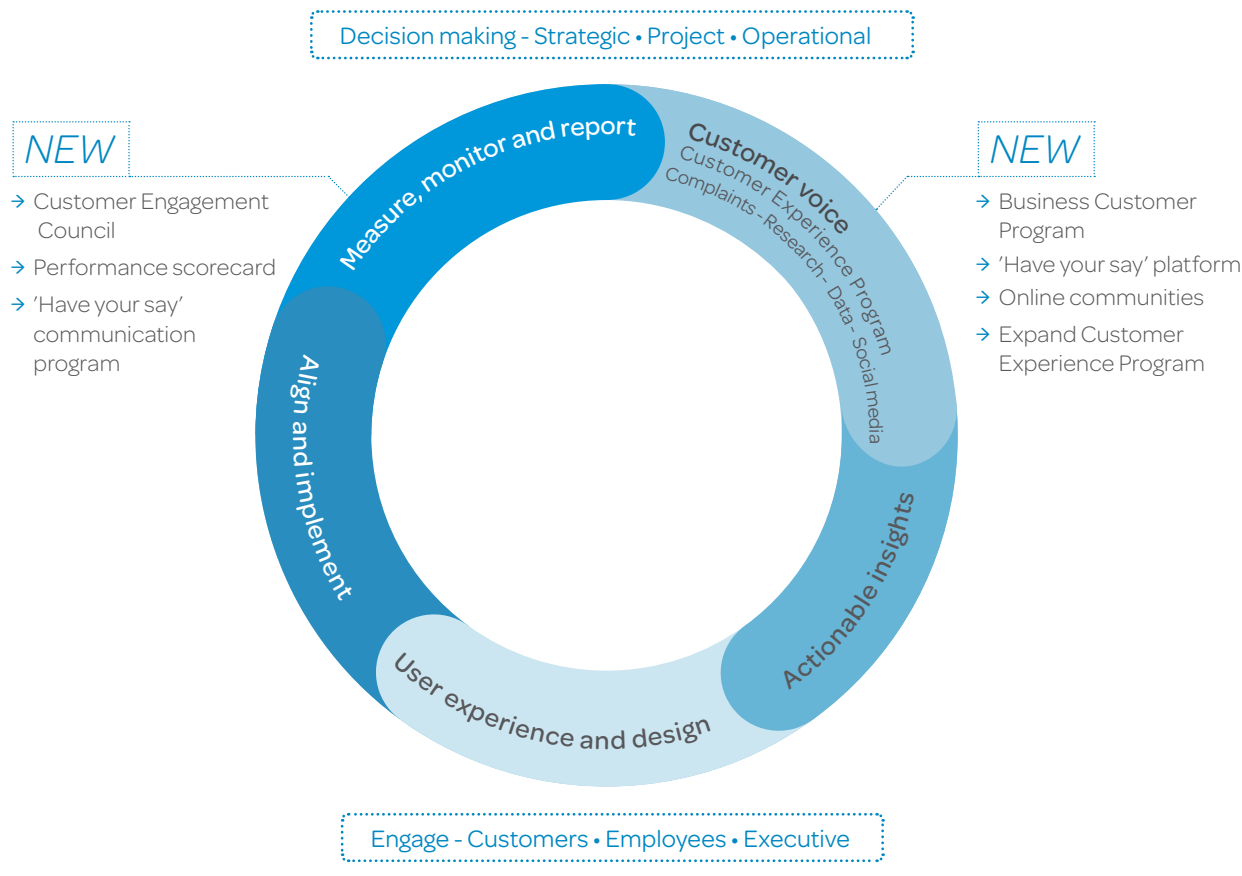
touchpoints so we can best monitor our performance and communications against the evolving needs and expectations.

They will also be extended to customers who do not interact with us (including business customers) to ensure we can better assess the ongoing needs and expectations of all customers.

Managing the relationship and service needs of our business customers, particularly our development sector, local councils, plumbers, real estate agents and large commercial customers are key opportunities for improvement for our engagement program. In the lead up to, and during the next regulatory period, we will establish (and in some instances re-establish) partnerships and relationships with these customers to co-create service plans that deliver the value and levels of experience they are seeking.

Fig5 Our Customer Engagement Framework

This diagram shows our Customer Engagement Framework which supports our strategic, project and operational decision making – including new additions that we commit to during the next regulatory period.



Customer outcome 1



Get the basics right, always

- Safe and clear water
- Reliable water supply
- Sewage taken away and treated safely

What our customers say

The number one priority for our customers is that we continue to reliably deliver fundamental services and get them right: supplying safe, high-quality drinking water and safely removing and treating sewage.

What we do now

We deliver quality water and sewerage services via a reliable network. To do this we invest \$54 million a year of capital expenditure in renewing our 25,250 km water and sewer network and managing eight water recycling plants.

Our five-year approach

We propose recommitting to existing high standards and measures around water quality and unplanned interruptions, investing in ongoing maintenance of our network and proactively seeking continuous improvements in addressing water quality.





What our customers told us

When it comes to what our customers value most from South East Water, there's a common, critical and non-negotiable expectation: that we deliver safe and reliable water and sewerage services now and always.

"Keep focused on what you do best: quality reliable affordable water supply." – Brian, 45-54 home owner, South Yarra (via bill simulator)

Customers not only rely on us for safe drinking water, but to effectively manage sewage disposal, too. It's not only seen as our job but something we're entrusted with and expected to do well.

Getting our basics right builds trust with our customers and offers permission to innovate, invest or concentrate on other areas that our customers value.

"Basics should be done effortlessly. Getting the basics right by having safe/clean drinking water means that me and my family are well looked after and it's one less thing that we have to worry about," – Ray, 35, Huntingdale online community

There is limited willingness from customers to pay for higher levels of service when it comes to our core business. As experts in our field we're expected to innovate and continuously improve.

Customers value safe and clear water

Our customers assume that having access to clean water is a given and one of their highest priorities is that we continue to deliver this.

Not only are we obligated to provide quality drinking water under the *Safe Drinking Water Act 2003* and associated regulations and guidelines, water quality sits at the very heart of our vision to deliver healthy water for life.

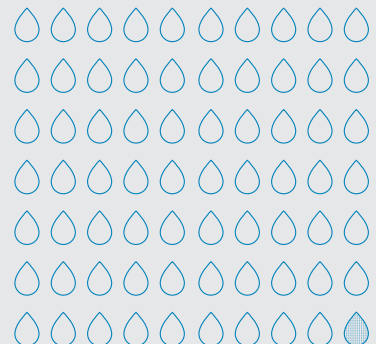
Customers on our bill simulator equated water quality with value, describing it like a precious commodity: *"pure", "clean" and "like a diamond"*.

The quality of the water we supply instils a sense of passion and pride for many, with residential and business customers alike believing their water quality to be some of the best in the world.

Given the high regard for our water, how we respond to any water quality issues is of utmost priority for our customers – especially as changes in colour, odour or taste can cause concerns.

Since July 2014, 51 per cent of total customer complaints to South East Water relate to water quality, with 80 per cent of these directly relating to colour and 17 per cent to taste and/or odour. (Customer Experience and Business Insights)

The main responsibility for water quality resides with our bulk water provider, Melbourne Water, which harvests and treats water to a high standard prior to delivery to South East Water. However within our network some sedimentation can occur, which can be apparent under peak flow conditions leading to discoloured water and customer complaints. The number of complaints is relatively small when compared with other water corporations, however we recognise that every complaint is a chance for improvement.





“The most important thing to me is that when I turn on the tap I know I have access to safe and clean water that is clear in colour and odourless.”
– online community participant

When experiencing a water quality issue, some customers express and expect a greater sense of urgency from our response, as well as reassurance and compensation. To this end, they suggest we develop a better communication system for those caught up in unplanned interruptions or alert them about issues such as water discolouration. They also want to be kept informed about the progress of repairs (see ‘Outcome 2: Warn me, inform me’).

Customers also trust us to undertake the most recent innovations to bring them a constant and reliable flow of the best quality water.

Customers value a reliable water supply

Our customers rely on us 24/7. They trust us to provide a reliable supply of quality water and have high expectations that we won’t let them down.

They understand that maintaining our network to provide a reliable water supply (and expanding it to cater for customer growth) is “part of doing business”.

50%

Customers on our bill simulator who support paying more to fund water mains renewals to help ensure ongoing reliability of our water supply network. A \$1 annual bill increase is seen to be acceptable for this.

Customers value safe sewage disposal

Customers ranked removing and safely treating sewage as their fourth highest priority out of 34 in our customer value research. They also prioritised reducing spills in our sewer network.

However some customers were surprised we even managed sewage disposal and thought this was a council responsibility.

Whether customers associated this service with South East Water or not, they definitely understood the importance of the safe removal and treatment of sewage:

“In the interest of public safety this is one of the most crucial aspects of general health.” – online community participant

While customer value and sentiment around water quality, supply and reliability is extremely high, sewage removal and treatment remains an “invisible service” to many – out of sight, out of mind.

39%

Customers who see us as experts in sewerage solutions, according to our customer value research.

Overall, customers trust “sewage is being taken care of and doesn’t impact my health” and much like water quality, if any issues were to arise that they would be “fixed straight away” – (online community participant).

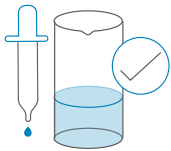


What we do now, our plans and measures

We are on the right track in delivering the basics, in line with what our customers most value and expect. This is why aspects of our ongoing approach proposes to maintain existing levels of service, while also introducing new actions to better deliver on the expectations of our customers.

Safe and clear water

Each year, our team of water quality specialists closely monitors the quality of our drinking water and takes approximately 8,000 samples from the water supply system.



8,000
water samples
tested per year

Our drinking water has received 100 per cent compliance against all regulatory measures across the 22 year history of our business. In our most recent *Annual Drinking Water Quality Report 2015-16*, our water quality complaints remained below the ESC target.

During the next regulatory period we propose to:

1. Deliver on the value that our customers and community place on safe, high quality drinking water. This means committing to maintaining the targets we have set for compliance against water quality standards and complaints (and monitoring this performance throughout the period).

2. While we propose to maintain current levels of water quality complaints as a minimum, we propose to proactively minimise quality concerns and complaints by exploring more effective ways to notify and educate customers when an incident may lead to water quality concerns (particularly brown water) - see enhanced notifications under 'Outcome 2: Warn me, inform me'. Additionally we propose to improve awareness about our water quality website and its content so that customers know they have 24/7 access to their suburb's water quality profile and any related issues.

Table 5 Water quality and complaints

	2016-17 current performance	2018-23 target
Percentage compliance with drinking water standards	100%	100%
Number of water quality complaints per 100 customers	0.18	0.18





Reliable water supply

We currently achieve a high standard of water supply reliability in line with guaranteed service levels; approximately 500 customers receive greater than five unplanned water supply interruptions a year.

During the next regulatory period we propose to:

1. Maintain our current high level of performance in water supply reliability on average. To achieve this throughout the next regulatory period will require an increase in our Water Mains Renewal Program due to our ageing network. During the period, we plan to upgrade 35 per cent more water mains than were undertaken during the current regulatory period, which will translate to an increase in expenditure of \$7 million per annum.

2. Invest in new water supply infrastructure through our Drinking Water Network Growth and Recycled Water Network Growth programs. These programs will leave a legacy of high quality infrastructure which will serve the community for generations.

Results from our bill simulator show that customers support a small increase in their bill in order to maintain current service levels.

Table 6 Customers receiving greater than 5 unplanned interruptions

	2013-18 current period average performance	2018-23 target
Number of customers receiving greater than 5 unplanned water supply interruptions	532	532

Sewage that's taken away and treated safely

To maintain our current high levels of sewerage reliability, we currently conduct an evidenced – based cleaning program, informed by blockage history and examining all contributing factors to renew assets where appropriate. We invest significantly to ensure our sewerage network and water recycling plants treat sewage appropriately and in line with community expectations.

During the next regulatory period we propose to:

1. Continue ensuring high reliability of sewerage services to minimise sewer blockages and spills on our customers' properties. As a minimum, we propose to maintain our high sewerage service levels, where we aim to ensure that customers do not receive more than three sewerage blockages in a 12 month period (refer to 'Guaranteed service levels'

section). This will be supported by ongoing Sewerage Network Renewals Programs and enhancing our Sewer Monitoring Program to better detect potential blockages in the network.

2. Invest in projects to cater for a growing community through our Sewer Network Growth Program and a major expansion of our Boneo Water Recycling Plant.

Table 7 Customers receiving 3 or more unplanned sewerage blockages

	2016-17 current performance	2018-23 target
Number of customer receiving 3 or more unplanned sewerage blockages	17	17

Key actions, activities and programs to help get the basics right, always



Project	Cost (\$M)	Impact to average customer bill (\$ per annum)	Description
Cater for customer growth (water, sewer and water recycling plant growth programs)	\$564M (CAPEX) Offset by new customer contributions of \$168M and revenue from new customers	\$0	<ul style="list-style-type: none"> → Focus on providing high quality water and sewerage services to all new customers, primarily in the growth areas of Casey and Cardinia. → Upgrade the Boneo Water Recycling Plant to cater for additional sewage flows and loads from population growth and backlog connections in the Mornington Peninsula. <p>Refer to 'Capital expenditure forecasts' for further information.</p>
Water quality programs	Ongoing program of \$1M per annum of OPEX and \$0.2M per annum of CAPEX	\$0	<ul style="list-style-type: none"> → Continue ongoing works to maintain water quality levels. → Investigate better ways to notify customers when an incident may cause water quality concerns.
Water Mains Renewal Program	\$21M per annum (CAPEX)	+\$1	<ul style="list-style-type: none"> → Manage unplanned water interruptions. → Replace pipes at the end of their functional life. → Increase investment to prevent any increase to the number of customers experiencing repeat interruptions (customers have told us they are willing to pay to maintain existing levels of services). → Provide allowance for proactive expenditure to minimise the risk of flooding causing significant disruption to the community or individual properties. <p>Refer to major projects in 'Capital expenditure forecasts' section.</p>
Sewer Monitoring Program	\$1.5M per annum (CAPEX)	\$0	<p>To support both sewerage reliability for individual customers and to minimise spills to the environment (see 'Outcome 5: Support my community, protect our environment'), we propose to enhance our existing Sewer Monitoring Program by:</p> <ul style="list-style-type: none"> → installing additional early warning surcharge monitoring devices in the sewers in designated high risk areas → installing water quality monitoring devices at three drain outfalls to detect poor water quality → continuing our proactive cleaning/chemical treatment program → developing models to assist in better targeting management activities → continuing to actively engage customers on key issues affecting sewer blockages e.g. wet wipes, building debris.

Customer outcome 2



Warn me,
inform me

- Keeping customers informed and in control
- Rectifying interruptions to minimise disruption
- Reducing disruption in peak times
- Understanding individual needs and impacts

What our customers say

Whether a supply or service interruption is planned or unplanned, warnings and proactive notifications aren't just highly valued – they're expected.

What we do now

We issue SMS and email alerts to 63 per cent of customers for both emergency and planned outages; comparatively, our rectification times lead the metropolitan Melbourne water sector.



Our five-year approach

We plan to increase the number of customers warned and informed about disruptions, with a focus on minimising disruption during peak times and maintaining our high standards related to fixing faults. We want to better understand the impacts of even the smallest outage or interruption on our customers' daily needs and routines.



What our customers told us

While our customers rely on us to get the basics right, they're aware and understand that our services may be interrupted from time to time.

Customers value attempts to minimise disruption

Customers who have experienced a service disruption are less forgiving if they weren't warned or informed about what was going on and when the outage would be resolved.

Whether the interruption is planned or unplanned, warnings and proactive notifications aren't just highly valued by our customers – they're expected.

"I want to receive notifications for all relevant faults and emergencies, regardless of whether I can contact the support centre 24/7."
– 65+ male, Sandringham (via bill simulator)

Customers want to be kept informed and in control

We are one of the only water corporations to send email and SMS notifications for unplanned and planned works (except between 10 pm and 6 am).

"You sent me a text message, I knew what was going on... my elderly neighbour didn't but I could tell her." – focus group participant

For many customers, both residential and business, progress tracking on works underway is also important, providing certainty, a sense of control and transparency.

While progress tracking is a relatively new expectation, its use by other industries provides greater expectation in ours: *"I can track my pizza with Dominos... why can't I track your trucks and what's happening?"* – focus group participant

It's a demand we pre-empted with the development of South East Water LIVE, an online portal where customers can track works in their area, or track and report faults online in real-time.

Being warned and informed about faults and interruptions is valued by our customers, who appreciate the control and certainty that it provides. Results from our bill simulator show that more than 30 per cent of customers are willing to pay more to support increased investment and improvement in this area.



Customers want us to understand their individual needs and impacts

As an essential services provider, there's customer demand for us to better understand the impacts of even the smallest outage or interruption, and the timing of these, on their daily needs and routines.

"Be aware if the household has a baby or elderly people in the house."
– CALD focus group, Vietnamese community member

"I couldn't get the kids bathed, school clothes washed or dinner cooked." – online community participant

One-on-one interviews with large corporate customers showed that expectations for notifications are heightened for those with special needs (*"I want to know ahead of time. I have to plan"*) and those who need to plan to manage associated risks (*"We operate 24/7. Interruption is a very big risk for us"*).

For some large business customers, notification around even the potential risk of outages was just as important: *"We even want to discuss a risk possibility, not even an actual one... We have response plans in place for possible outages."*

In the case of some small and large business customers, the disruption of even small outages can be large, impacting operations and revenue: *"I got to the stage where we had a day's production in tanks... I actually ran out of water twice and stopped production."*

Customers want us to rectify interruptions to minimise disruption

For our customers, it's equally important that we respond quickly to any faults or interruptions and *"fix it immediately"* (online community).

For many, speed to rectify the issue outweighs other elements such as compensation: *"I didn't care about the money, I'd give it to the bloke to fix it faster"* (focus group).



What we do now, our plans and measures

We have tailored our approach for the next regulatory period based on our customers telling us that they expect to be warned and informed about water supply faults to help minimise disruption to their lives.

Keeping customers informed and in control

When there is a water fault or outage, we inform customers via email and SMS notifications under our Digital Notification Program (where we have mobile and email details) as well as by more traditional methods such as mail and letterbox drops.

In 2016-17, we extended our Digital Notification Program and sent more than 120,400 alerts to keep customers better informed about water outages (compared to 65,184 during 2015-16).

Via our bill simulator, customers told us that they support our Digital Notification Program and support communication enhancements to better inform them when there is an interruption.

During the next regulatory period we propose to:

1. Increase the number of customers notified when there is a water supply interruption. We will measure the percentage of customers notified for unplanned water supply interruptions via email and SMS (for whom we have contact details). We will achieve this increase by enhancing customer data and communication capabilities. We will also trial extending our notification periods, as we currently notify customers

when the interruption is between 6 am and 10 pm, or when it is longer than 30 minutes.

3. Explore email and SMS notifications for other types of interruptions, including sewerage blockages and potential water quality issues.
4. Provide even greater transparency about our strong performance in speed of response and rectifying water and sewerage supply interruptions to ensure our customers are better assured during times of disruption.
5. Improve South East Water LIVE functionality and raise customers' awareness that they can track what we're doing online 24/7.

Table 8 Customers notified when there is a fault

	2016-17 current performance	2022-23 target
Percentage of customers notified per unplanned water supply interruptions (for whom we have email/mobile details, greater than 30 minutes)	60%	80%





Rectifying interruptions to minimise disruption

During the next regulatory period we propose to:

1. Maintain our average duration of unplanned water supply interruptions in line with the following, ongoing guaranteed service level obligations to best minimise the time we take to rectify water and sewerage interruptions:

- unplanned water supply interruptions restored within five hours
- sewerage interruptions restored within four hours
- internal and external sewage spills.

2. Maintain our service levels in planned water interruptions restored within the notification period.

Currently, 98 per cent of our planned interruptions occur within the notification period we give to customers. We also have a high level of performance in meeting rectification times, comparative to the industry, with an average duration of unplanned water supply interruptions of approximately 88 minutes per interruption .

Please refer to the ‘Delivering on customer outcomes’ section, which outlines the proposed payments for not meeting these guaranteed service levels.

Throughout our customer engagement, customers indicated that they want us to focus on rectifying interruptions rather than just responding to them.

Table 9 Average duration of unplanned water supply interruptions

	2013-18 current period average performance	2018-23 target each year over period
Average duration of unplanned water supply interruptions	88 minutes	88 minutes

Table 10 Water supply interruptions restored within notification period

	2013-18 current period average performance	2018-23 target each year over period
Percentage of planned water interruptions restored within notification period	98%	98%



Reducing disruption in peak times

As part of our commitment to enhancing our understanding of customer disruption levels associated with network faults and works, we are investigating ways to reduce disruption in peak times. We are currently implementing a survey so that customers have the opportunity to provide specific feedback to better inform us of their level of disruption, key areas

of impact and opportunities for mitigation. This will be used as a basis for measuring disruption in future years.

During the next regulatory period we propose to:

1. Investigate ways to reduce the number of customers impacted during peak times (5 am to 9 am and 5 pm to 10 pm) when impact may be greatest.

2. Measure and reduce the number of customers interrupted during peak times as a percentage total of planned and unplanned water supply interruptions.

3. Investigate other ways to best reduce disruption as we gain an enhanced understanding through our surveys.

Table 11 Number of customers impacted by an unplanned water supply interruption in peak times

	2013-18 current period average performance	2022-23 target
Percentage of customers impacted by an unplanned water supply interruption in peak times	28.1%	27.6% (46,200 customers)



Minimising disruption

To meet our agreed service levels, South East Water renews approximately 35 km of water mains each year, which impacts approximately 4,000 customers. These customers have generally experienced three to four interruptions within 12 months. To minimise their disruption while we renew their water main, we have designed an approach where customer water supply is only interrupted for five minutes while we connect an interim supply, and for another five minutes when we reinstate supply with the new water main.

In cases where a main shutoff is required, the number of customers impacted has been dramatically reduced through technology that uses a pneumatic temporary valve arrangement. In all instances customers are notified in advance. We have surveyed the customers impacted by these works, to gain insights on our performance including inconvenience, reinstatement and noise so that the renewal process is continually improved and the impact to customers is minimised.

Understanding individual needs and impacts

We have learned from our customers, both residential and business, that even the smallest interruption can impact their lives.

To improve our proactivity in minimising the impacts of faults and outages, during the next regulatory period we propose to:

1. Improve how we capture and manage customer details and preferences.

2. Improve awareness of the support services we provide to help minimise disruptions (such as alternative water supplies, bottled water, alternative accommodation and clean up support in the event of sewage spills) so customers can be assured that we recognise individual needs on a case-by-case basis.

Key actions, activities and programs to help keep our customers warned and informed



Project	Cost (\$M)	Impact to average customer bill (\$ per annum)	Description
Expand Digital Notification Program	Business Support Systems Program, which supports a number of outcomes Refer to 'Capital expenditure forecasts' section	+\$3	<ul style="list-style-type: none"> → Extend notification capabilities to a broader range of fault and emergency work types. → Understand and influence an enhanced customer experience. → Capture customer contact details and enhance ongoing data quality and management. → Explore new ways to measure and monitor disruption.
Operations and Maintenance Program	Delivered through baseline expenditure. Approximately \$7M in direct costs currently within baseline operating expenditure	\$0	<ul style="list-style-type: none"> → Continue existing program to maintain high levels of service in rectification. → Focus on minimising disruption where it's efficient to do so.

Customer outcome 3



Fair and
affordable for all

- Provide greater bill certainty and control
- Keep costs down
- Digitisation to deliver customer benefits

What our customers say

Customers want costs kept down and assurance that our services and charges are fair and affordable. They expect us to drive efficiency through digitisation and provide the levels of bill certainty, control, rewards and incentive they receive from other providers outside the water sector.

What we do now

We provide customers with a variety of payment solutions and digitised service offerings. More than 31,000 customers pay monthly or fortnightly, 102,500 are on direct debit and 236,000 receive bills electronically. We also support more than 4,500 vulnerable customers through our South East Water Assist program.



Our five-year approach

By driving greater levels of efficiency through digitisation, exploring better ways to provide bill certainty and control, and continuing our dedicated support for vulnerable and hardship customers, we're confident in delivering services that are fair and affordable for all.



What our customers told us



We collaborated with other metropolitan water corporations to attend community events and hear what customers have to say.

Customers want greater bill certainty and control

Our customers value choice to provide greater bill certainty and control. Our engagement highlighted that this means different things for different people. For some this means the option of a simpler bill – so they clearly understand what it means and what they're paying for.

In our customer value research only 34 per cent of customers said they knew 'a lot' about the bill. If we made even minimal changes to the bill, 74 per cent of customers told us that their satisfaction would improve. (Customers ranked this 19 out of 34 potential priorities).

For others reassurance of a choice of payment method and knowing they can pay delivers all the certainty and control they need: *"The bill smoothing is so comforting for me to manage my bill as a single mum, thank you."* – participant on bill simulator

However, for most customers certainty and control is directly linked to reward and recognition, particularly popular discounts and incentives they receive from other utilities for paying on time or paying early:

"At least a pay on time discount will be a good start. Hopefully one day this will come true" – Jihui, Mordialloc, Have Your Say website

Over 75 per cent of our customers pay on time every time making the provision of pay on time or early bird discounts unfeasible. The concept of increasing bills to fund such rewards was definitely not something customers were keen on, with many then starting to question how fair such incentives were for all, especially those vulnerable and unable to pay on time.

Discounts or rewards for bundle packages such as e-bills and direct debit were also popular and something our customers are keen for us to explore:

"eBills and direct debit is a no brainer and people should be encouraged in the strongest possible way to adopt these methods." – bill simulator participant

40%

Customers who completed our bill simulator who are willing to change to eBilling and direct debit if it results in savings on their bill.

Customers want costs kept down

Our customers expect that services and charges are fair for all and costs should be kept as low as possible; 80 per cent of customers surveyed as part of our value research said their satisfaction would improve if they knew that South East Water is operationally efficient (they ranked this eight out of 34 potential benefits).

Customers support digitisation to deliver benefits

It was clear throughout our engagement program that customers support the benefits of digitisation.

For example, when surveyed as part of our value research, 62 per cent of customers suggested that their satisfaction would improve if they were able to check and monitor their water usage online in real-time.

Local councils also flagged the need for such data for accountability and forward planning.

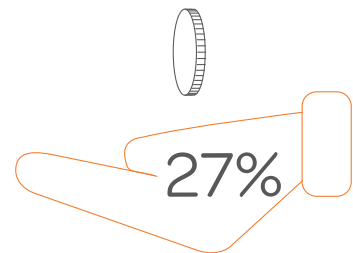


Results from our bill simulator suggest that an average annual bill increase of \$3 is seen as reasonable to enable digitisation. Customer comments indicated they expect it would create efficiencies and savings: *“Improving your digital offering should be your priority as it should improve your operating efficiency.”* – 35-44, male, tenant

With water a fundamental part of life, 69 per cent of customers who participated in our value research said their satisfaction with South East Water would improve if they knew we would help them if they needed support paying their bill.

“My wife and I have recently experienced a period of financial hardship, the South East Water hardship team have been wonderful in the way our case was handled with empathy and most importantly respect.” – 45-54 male, home owner

Results from our bill simulator showed that while 27 per cent of customers support increased investment in helping those in financial difficulty, most customers preferred that we raise better awareness about our support program and how to access it, rather than contribute additional funding.



Customers support us helping those in need

“Supporting the community must be a priority, especially those suffering from personal or financial vulnerability.” – 25-34 year-old male, tenant

However there was a strong theme in focus groups where customers felt they were already paying for people in financial difficulty through their taxes and that those who are vulnerable are already receiving government benefits.

What we do now, our plans and measures

To support bills and services that are fair and affordable for all, we plan to undertake the following initiatives based on customer feedback.

Provide greater bill certainty and control

Choice will be central to providing customers with a greater level of bill certainty and control.

During the next regulatory period we propose to:

1. Expand billing options and provide more information to allow customers to better manage their bill. This includes exploring discounts for eBill and direct debit customers. We will not pursue pay on time discounts, having

determined them to be unfeasible without increasing spend (which customers do not support)..

2. Further investigate choice tariff options and payment flexibility (especially to support vulnerable customers), with affordability not just about business efficiency and lower bills.

Keep costs down

Our goal to achieve a more affordable bill is a priority for our customers, too.

During the next regulatory period we propose to:

1. Reduce our operating cost per property by nine per cent from current levels, in addition to achieving efficiencies in operating

and capital expenditure (as outlined in this submission).

2. Work to increase customer awareness about our performance (including our track record as one of Australia’s most operationally efficient water corporations) and make details about this more accessible to help inform how we’re delivering value for money.

3. Work collaboratively with Melbourne Water to ensure it is aligned with this objective to keep costs down.

Please refer to the ‘Operating expenditure forecasts’ section for further detail on our approach to forecasting, which demonstrates our commitment to efficiency.

Table 12 Operating cost per property

	2016-17 actual	2022-23 target	Target % change
Operating cost per property	\$161	\$147	-9%



Digitisation to deliver customer benefits

Most customers see increases in digital services and automation as the key to providing greater choice – and more importantly to creating business efficiencies that can be reinvested into other areas that need improvement.

During the next regulatory period we propose to:

1. Continue driving efficiency through digitally transforming how we operate as a business and how we interact with our customers. While this will support all customer outcomes, benefits specifically related to this outcome include:

- providing greater information to help customers manage their bills and avoid 'bill shock'
- supporting our approach to minimising disruption to customers
- supporting a change in customer behaviour, by providing customers with tools that will

help empower them to reduce drinking water consumption.

Awareness and access for those in need

South East Water Assist is our dedicated program that supports customers who intend to pay their water and sewerage bills, but who may not have capacity to do so.

This may be due to low income or circumstances that are unplanned or uncontrollable. South East Water Assist manages approximately 4,500 customers every year, providing various support options ranging from payment plans, water saving audits and advice, through to bill management tools and access to community support services and government concessions and grants.

During the next regulatory period we propose to enhance South East Water Assist in the following ways:

1. Increase the number of customers supported by the program by:

- reducing the average level of debt upon entry to the program
- increasing awareness about the program and our support options
- implementing predictive capabilities to identify customers who require assistance, to address any payment difficulties early on.

2. Provide guidance and advice to high water users to reduce their usage to be more consistent with typical levels for their household size – in turn helping to improve their capacity to pay.

3. Provide personalised solutions and advice to help customers keep their bill amounts on track, which allows them to better manage ongoing costs and achieve account independence.

We therefore propose new targets to measure our performance in increasing the number of customers assisted by the program, as outlined in the following table.

Table 13 Support for vulnerable customers

	2016–17 current performance	2022-23 target	Target % change
Number of customers supported by South East Water Assist	4,557	7,147	57%
Average level of debt upon entry to South East Water Assist	\$925	\$800	-14%

Key actions, activities and programs to help keep our prices and services fair and affordable for all



Project	Cost (\$M)	Impact to average customer bill (\$ per annum)	Description
Enhance South East Water Assist program	Delivered through existing baseline expenditure	\$0	<ul style="list-style-type: none"> → Review and consolidate effective support options to identify vulnerable customers in a more proactive manner. → Work with our customers to make them more water efficient. → Provide more streamlined services to vulnerable customers by automating processes i.e. CentrePay. → Review our servicing model to provide more options to assist vulnerable customers at every touch point.
Digital Capability Pilot	Initial development costs of \$10M CAPEX for pilot phase proposed	+\$1	<ul style="list-style-type: none"> → To digitally transform how we operate as a business and how we interact with our customers, as outlined in 'What we do now, our plans and measures' in this section. → Undertake an end-to-end digital capability pilot, which will include digital meters, associated information technology and communications capabilities to allow customers to monitor their water consumption. <p>Please refer to 'Capital expenditure forecasts' section for further information.</p>
Enhance billing and payment initiatives	Delivered through existing baseline expenditure with the aim to deliver efficiencies through a greater take up of eBilling	\$0	<ul style="list-style-type: none"> → To review customer insights around our current billing and payment offerings with a view to develop and implement value added services. → Re-design the paper and eBill to improve transparency of charges and presentation of key information; simplify and improve payment options and knowledge. → Explore with customers payment options and payment behaviour i.e. discounts for eBills, direct debit, bill smoothing and other choice offerings. → Implement proactive, positive notifications such as bill due date pre-reminders (email and SMS).

Customer outcome 4



Make my
experience better

- Improve first contact resolution and reduce effort
- Increase choice, awareness and value perceptions
- Better understand individual needs

What our customers say

Customers are unwilling to pay more for better experiences; they simply expect them as good business practice. They want issues easily resolved the first time and for us to better understand their individual needs to enhance service delivery. Better communication to improve awareness of who we are and what we do is strongly supported.

What we do now

We achieve high levels of customer satisfaction and offer a range of choices when it comes to how and when customers interact with us, from our 24/7 online self-service environment and live chat to simply speaking directly with one of our locally based support staff.



Our five-year approach

We plan to improve our customers' awareness of who we are and what we do and will assess this against a new value for money measure. We also plan to encourage uptake of digital channels that deliver efficiencies and continue focusing on initiatives (such as staff training) to improve first contact resolution and reduced customer effort. We plan to better understand customer satisfaction and needs by expanding our customer experience surveys to include more channels and customers.



What our customers told us

While customer satisfaction with the experiences we provide is high, averaging more than 90 per cent year-on-year, our customers have made it clear that we can always do better.

Yet with the exception of some business customers who are willing to pay for more personalised experiences (such as dedicated relationship managers), most customers were unwilling to pay for improvements.

Only 11 per cent of the 3,791 customers who completed our bill simulator indicated willingness to pay for service improvements, with 21 per cent suggesting reducing funding.

However as our engagement learnings have identified, this is not because experience improvements aren't wanted. They are simply expected as part of good business practice.

"Why should I have to pay for something I expect from any company?" – bill simulator participant

Surveys conducted through our Customer Experience Program during 2016-17 showed that 92 per cent of customers rated us six or more out of 10 for satisfaction with their service experience, while 75 per cent rated us nine or 10.



Customers want enquiries resolved first time with reduced effort

Business and residential customers alike have highlighted the importance of South East Water valuing their time and effort during service interactions. They prioritise first contact resolution of enquiries over speed yet find wait times and transfers frustrating. Keeping them informed or warned of service delays and the progress of their enquiries is also highly valued as it can prevent additional contacts and unnecessary effort (as evidenced in 'Outcome 2: Warn me, inform me').

90%

Customers participating in our value research who only want to contact South East Water once to resolve their issues.

"The worst is to be on hold with no idea how long the call will take before you speak to someone and then you find out they can't assist you and transfer you somewhere else and you're on hold again." – online community member

"Can't say I'm totally satisfied as I don't know if it has been rectified, even though (I've) been told it would be." – Marina, 56, Sandhurst

"I want the issue resolved and I don't want to chase things up." – real estate professional

Well trained, knowledgeable and empathetic staff, along with the convenience of our Melbourne-based support centre, are highly valued by business and residential customers alike. They are also considered key to effective enquiry resolution and quality service experiences.

"I'd pay more to keep the contact centre in Melbourne." – plumber, focus group

"Helped me with two issues quickly and efficiently and even offered more than I requested. Can your team take over electricity and telecommunications please?" – Robyn, 55, owner occupier, Elsternwick

"On the phone it depends on who you get. Some people understand and have more experience but others don't." – real estate professional

"Any difficulties encountered in the past have been handled in a helpful and sympathetic manner. South East Water ranks as the best utility provider in my view. Thanks for everything." – Peter, 76, owner occupier, Aspendale

Customers want choice and awareness about service offerings to understand the value we provide

Experience and service improvements are things some of our customers believe that as a monopoly (and commonly perceived private company) we overlook or don't invest in as they have no other choice of provider.

"We are stuck with the service... they are too greedy." – CALD focus group participant



This thinking correlates our service experience with value for money perceptions and is common among both residential and business customers.

51%

Customers who completed our bill simulator who believe we offer good value for money.



For many customers poor perceptions of the experience and value for money we provide are simply due to a lack of knowledge and awareness about South East Water and the service options currently available to them – particularly digital ones that offer choice, convenience and control. Automation of services and digital offerings are highly valued as they are seen as a way to deliver business efficiencies that could fund investment in other service areas important to customers.

“If you digitise and automate some of your offerings, you’ll be able to reinvest this in areas important to us.” – Co. creation workshop

“It’s better to do the little things online rather than calling and spending time on hold on the phone.” – female, 39, owner occupier, Cranbourne West

“I didn’t know you had an app - I’d use that.” - male participant, co-creation session

34%

Customers who are not aware of our ownership structure. Customers who understood we are government owned viewed us more positively in relation to the value we provide.

36%

Customers who think we are privately owned.

Customers want service that meets their individual needs

Our residential customers and business customers have told us that they value service experiences that meet their individual needs. We’ve learnt through our engagement that these needs are diverse and vary in terms of complexity. For some residential customers service needs are quite simple with transactional, digital interactions or even no experience or interaction highly valued.

“I have been in my unit for over five years now without a problem or any reason to contact them. I suppose you say no news is good news... if you are receiving good service you should never have to talk to them.” – CALD focus group, Vietnamese community member

This is similarly valued by some business customers including real estate agents, property managers, builders and even some plumbers who just want seamless, transactional and preferably online service experiences that let them get on with their job at hand.

For other customers it can be quite the reverse, with minimal engagement seen as impersonal and far from the emotional connection or genuine, ongoing relationship experience they are seeking.

“They treat me like a number. I get a bill via email every few months. That’s all the communication we have.” – online community member

This is particularly the case for a number of our large business customers including developers, local councils, large commercial industries and even water intensive retailers. In one-on-one interviews they expressed concern and disappointment in our lack of engagement, collaboration and the disappearance of relationship managers who previously provided a key point of contact, support and strategic advice during the Millenium Drought.

“What do I want from South East Water? Communicate effectively. Let us know about new things. Talk about it.”

“Bring back the relationship managers.”

“During the drought we had contact every day of the week but nothing now.”



What we do now, our plans and measures

We propose the following measures during the next regulatory period, to make our customers' experience with us even better.

Improve first contact resolution and reduce effort

Historically, we have measured customer satisfaction post interactions in the contact centre. On average during the current period, 92 per cent of customers ranked us on a score of six or above (out of 10).

We propose to deliver improved key programs to enhance customer experience, including a major focus on reducing customer effort, improving resolution of issues and keeping customers better informed (see 'Outcome 2: Warn me, inform me').

During the next regulatory period we propose to:

1. Re-align our business processes, structure, systems and employee training to drive greater resolution of enquiries on first contact.
2. Explore more proactive ways to warn or inform customers about service wait times and resolution timeframes to reduce effort and avoidable contacts.
3. Continue automating existing processes, introducing new digital offerings and improving the user experience across existing ones (specifically our website, app and self-service environments) to reduce customer effort, deliver better value and drive efficiency gains that can be invested into other experience improvements customers expect.

4. Enhance our complaint management processes and analytics to enable early identification of key service trends and opportunities for improvement to help reduce complaint numbers.

At a minimum we propose to maintain our existing performance levels while absorbing customer growth.

5. Explore new measures to monitor first contact resolution and customer effort in 2017-18 to provide a baseline target for reporting back to customers by the start of the next regulatory period. Targeting 85 per cent, we'll continue to measure customer satisfaction through post interaction experience surveys and expand these across more channels – specifically digital ones.¹

Table 14 Customer satisfaction and total complaints

	2016-2017 current performance	2022-23 target
Customer satisfaction – rating of 6 or above	81%	85%
Total customer complaints per 100 customers	0.43	0.37

Increase choice, awareness and value perceptions

We'll work with our customers to explore effective and meaningful ways to engage them around our service offerings and performance to improve their awareness and value for money perceptions.

During the next regulatory period we propose to:

1. Introduce targeted engagement and communications programs to:

- increase our customers' understanding of who we are and our service offerings

- improve their value for money perceptions
- drive uptake of digital channels.

2. Monitor the success and impact of these programs through the introduction of a value for money measure in our post interaction surveys.

Better understand individual needs

We're committed to better understanding our customers' needs, particularly our business customers so we can best deliver the value and service solutions they are seeking.

During the next regulatory period we propose to:

1. Co-create and implement service plans that deliver the value and levels of experience that our business and residential customers expect.

2. Enhance our Customer Engagement Framework with the key initiatives outlined in 'Engaging with our customers', including expanding our customer experience surveys to include business customers, customers who don't interact with us and channels not currently measured.

1. Historically, we have measured customer satisfaction post interactions in the contact centre. On average during the current period, 92 per cent of customers ranked us on a score of six or above out of 10. During 2016-17, when including new touchpoints, 81 per cent of customers responded with a score of six or above out of 10.

Key actions, activities and programs to help make my experience better



Project	Cost (\$M)	Impact to average customer bill (\$ per annum)	Description
Service automation and reducing avoidable contacts	Supported by Business Support Systems Program – refer to 'Capital expenditure forecasts' section	Impact shown in Outcome 2: Warn me, inform me.	→ Improve service offerings to ensure user experience needs are met and effort is reduced, including through our mySouthEastWater app, Property Connect website, online services, call back services and queue management.
Customer Experience and Business Strategy Program	Delivered through baseline operating expenditure	\$0	→ Innovate and expand our current Customer Experience and Business Strategy. This will include a program of key initiatives to address service experience needs and unmet expectations across key customer segments, channels and touchpoints.
Customer education	Delivered through baseline operating expenditure	\$0	→ Develop and implement a coordinated communications approach to help customers better understand who we are, what we do and that it represents good value for money.
Customer data and relationship management	Supported by Business Support Systems Program – refer to 'Capital expenditure forecasts' section	Impact shown in Outcome 2: Warn me, inform me.	<p>Improve the quality, capture and management of customer data across all business areas:</p> <ul style="list-style-type: none"> → improve existing data capture and quality → build more detail and better understanding of individual customers, including preferences and needs to tailor experiences → centralise and consolidate all customer interactions and data into one system (Salesforce), to provide a single source of truth and improve management of relationships and experiences. <p>These actions also support the delivery of enhanced notifications for interruptions – please refer to the table in 'Outcome 2: Warn me, inform me'.</p>

Customer outcome 5



Support my community, protect our environment

- Reduce our carbon emissions
- Minimise sewage spills to the environment
- Create a water efficient community

What our customers say

They seek reassurance about future water supply and have confidence in our ability to help shape a more sustainable Melbourne. They support expansion and use of recycled water and our carbon emissions reduction targets.

What we do now

We're future-focused, putting liveable communities and a healthy environment at the forefront of our decision-making and creating technology that supports water efficiency. We're on a path to become carbon neutral by 2030.



Our five-year approach

We propose to focus on environmental and community impacts by reducing carbon emissions and using advanced network monitoring to mitigate sewer spills and beach closures. We also plan to expand urban water recycling to support liveable communities.



What our customers told us

79% Customers surveyed on our 'Have your say' site who think it's important or extremely important that South East Water promotes water efficiency through education and community engagement.

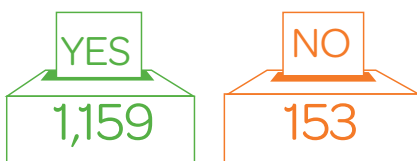
Customers believe that South East Water should focus on being environmentally responsible as well as give back to the local community.

Customers support us reducing our carbon emissions

Our engagement revealed that reducing our carbon emissions is a relatively high priority for our customers.

Some customers supported this happening sooner rather than later.

A survey on our 'Have your say' site posed the question "would you pay a few more dollars for us to be carbon neutral earlier than our original goal of 2030?"



However survey results from our bill simulator suggest that 58 per cent of customers are happy with our current plan to reach zero emissions by 2030.

Customers want us to minimise our spills to the environment

Port Phillip Bay is widely loved and customers believe us to be well placed to show initiative in cleaning and protecting it.

Our value research revealed that 72 per cent of customers believe

their satisfaction levels with South East Water would increase knowing that we are contributing to keeping our beaches and waterways clean (ranking this 18 out of 34 priorities).

36%

Customers surveyed on our bill simulator who support an annual increased investment of \$1 per customer to reduce sewer spills.

"Just do it. We want it to go ahead. It's essential (protecting Port Phillip Bay)." – focus group participant

Customers support creating a water efficient community

Throughout the qualitative stages of our engagement customers showed strong support for a continued approach to delivering alternative water in new estates as well as investigating other ways to reduce demand on drinking water. They strongly supported us investigating ways to provide greater levels of recycled water for agricultural use, though generally expected us to find the efficiencies to deliver it (only 19 per cent of customers supported a monetary increase).

"Hands down! It's so important to invest into the future to ensure the best outcome for all generations. Imagine a future where we're

recycling, and saving water, and we never have to worry again! This would mean so much for the future generations, which is really important to me." – value research participant

82%

Customers surveyed on our 'Have your say' site who believe South East Water should research alternative sources of water for non-drinking purposes.

87%

Customers surveyed on our bill simulator who support continued alternative water supply for households without increasing investment in the Water Efficiency Program.

In our value research, customers considered water education to be essential and expect that South East Water will engage with schools and be involved in a positive way. Additionally, past water efficiency initiatives such as the Showerhead Exchange Program and water tank rebates were easily understood and resonate with customers as they have been educated during the Millennium Drought.



What we do now, our plans and measures

We propose the following measures during the next regulatory period, to deliver on supporting our community and protecting our environment.

Reduce our carbon emissions

1. Reduce carbon emissions by 29 per cent by the end of the next regulatory period. To do this we propose to:

- implement solar power at a number of water recycling plants
- identify new efficiency opportunities within our existing operations.

We have committed to achieving net zero carbon emissions by 2030 in line with our Statement of Obligations and the State Government's *Water for Victoria* plan. We have developed a pathway to reach our goal of

carbon neutrality by 2030 in a responsible and cost-effective way. To determine this pathway we reviewed a number of renewable options and due to available land, solar power was considered the most cost-effective option for large-scale energy generation. We will also seek to identify new efficiency opportunities within our existing operations.

Table 15 Carbon emissions target

	5 year average emissions	2022-23 emissions target	2022-23 emissions reduction target	2025 emissions reduction target	2030 emissions reduction target
CO ₂ emissions	41,774	29,690	-29%	-45%	-100%

Minimise sewage spills to the environment

Our current approach to managing our sewerage network results in approximately 20 significant sewage spills to the environment each year. Our customers place great importance on minimising our impact on beaches and waterways – and so do we.

During the next regulatory period we propose to:

1. Implement a program of enhanced sewer monitoring to investigate ways to prevent sewer spills.
2. Monitor the level of significant spills to the environment to demonstrate our commitment to minimising them. We propose to

maintain current levels, however this target could be reviewed throughout the period with better information around how we can reduce them.

3. Update guaranteed service levels so that we donate up to \$10,000 to a community group affected by a spill, if we cause a dry weather spill in our area and it results in a beach closure.

Table 16 Number of significant sewage spills

	2016-17 current performance	2022-23 target
Number of significant spills (dry weather)	20	20



Creating a water efficient community

Harnessing the water cycle, and not just relying on drinking water for purposes where it is not required, is critical to help secure water supplies for future generations – helping to create water efficient communities that are more resilient to the impacts of climate change and a growing population.

During the next regulatory period we propose to:

1. Explore projects that incorporate rainwater capture into their design to relieve pressure on drinking water supplies. This includes using:
 - rainwater for non-drinking, hot water purposes in the Aquarevo development
 - rainwater tanks in buildings and open spaces at Fishermans Bend to capture rainwater for use in toilet flushing and irrigation.
2. Educate our customers about water efficiency to help support a balanced approach to managing

our water resources. By helping our customers to manage their water use as efficiently as possible, through a range of online and offline products and services, we will seek to ensure we can deliver enough water with limited use of water restrictions into the future.

3. Increase the level of drinking water substitution for customers already connected to the recycled water network.

We currently deliver recycled water to approximately 11,800 households for toilet flushing, laundry and outdoor use (as at September 2017). However approximately 13,000 households are connected to Class A recycled water infrastructure in the eastern growth area between Cranbourne and Pakenham, that are not receiving recycled water. In the current regulatory period, connecting infrastructure was delayed until a critical mass of customers were connected to justify making the investment.

Maintaining our recycled water investment in the next regulatory period will enable the interconnectivity of our recycled water networks to increase alternative water use in greenfield areas. We will also investigate ways to increase alternative water usage at each household, including encouraging its use in the laundry.

4. Reduce the price of recycled water to provide greater incentive for recycled water customers to use it (see 'Tariff structures, prices and customer impacts' section).
5. Explore opportunities to increase the supply of recycled water to agricultural customers. This includes acting as an enabling institution to increase the amount of recycled water that is used, both to improve environmental outcomes from reduced effluent discharge and to support the community with a drought proof water supply.

Table 17 Alternative water connections and usage

	2016-17 current performance	2022-23 target
Percentage of customers in designated greenfield areas receiving alternative water (residential only)	47%	77%
Volume of alternative water as a percentage of total water used in designated greenfield areas (residential only)	12%	20%

Key programs to help deliver on support my community, protect our environment



Project	Cost (\$M)	Impact to average customer bill (\$ per annum)	Description
Reduce carbon emissions	\$21M CAPEX during the period -\$4.4M (OPEX savings)	\$0	<p>→ Deliver programs that support reducing carbon emissions and achieving our emissions reduction targets, including solar power generation at a number of our water recycling plants. This will be offset by reduced energy costs once the solar panels are commissioned.</p> <p>Refer to 'Capital expenditure forecasts' and 'Operating expenditure forecasts' sections for further detail.</p>
Deliver alternative water sources for urban purposes	\$39M (net of new customer contributions)	\$0	<p>→ Deliver programs that support targets to increase the level of potable substitution as a proportion of total water usage:</p> <ul style="list-style-type: none"> - Continue to rollout recycled water network to mandated areas. - Increase the number of customers connected to recycled water network. <p>Refer to 'Capital expenditure forecasts' section for further detail.</p>
Expand recycled water supply for agricultural purposes	\$2.5M of seed funding	\$0	<p>→ Investigate options to efficiently expand the supply of recycled water for agricultural use in our region. This has the potential to provide environmental benefits through reduced waste being sent to the south eastern outfall.</p>
Create water efficient communities	Delivered through no additional cost – funded through other cost efficiencies	\$0	<p>→ Adopt an ongoing focus on water efficiency to support a balanced approach to managing our water resources:</p> <ul style="list-style-type: none"> - Continue to offer an innovative range of products and services to customers. - Find smarter and more efficient ways to educate communities around the value of water. - Find ways to better measure our performance in delivering and supporting a water efficient community.
Aquarevo	\$3.4M additional OPEX Revenue from land sales	-\$1	<p>→ Use Aquarevo to understand and demonstrate at a precinct scale that drinking water substitution is feasible. Aquarevo will consist of 460 houses that are supplied with drinking water by a centralised reticulation network, along with recycled water from a local treatment plant and a heated rainwater via rain-to-hot-water system.</p> <p>Refer to 'Operating expenditure forecasts' section for further information.</p>
Septic Tank Management Program	Aimed at avoiding future capital costs		<p>In 2016 South East Water and Mornington Peninsula Shire Council developed an improved septic tank management regime, where an additional treatment charge is levied for the treatment of sewage, which in turn assists the funding of a field officer to oversee the Septic Tank Management Program. South East Water, Melbourne Water and Mornington Peninsula Shire Council are now partnering in the pilot project aimed at improved management of septic tanks.</p>

Delivering on customer outcomes

We are committed to delivering our customer outcomes and the services that support them without materially increasing bills.

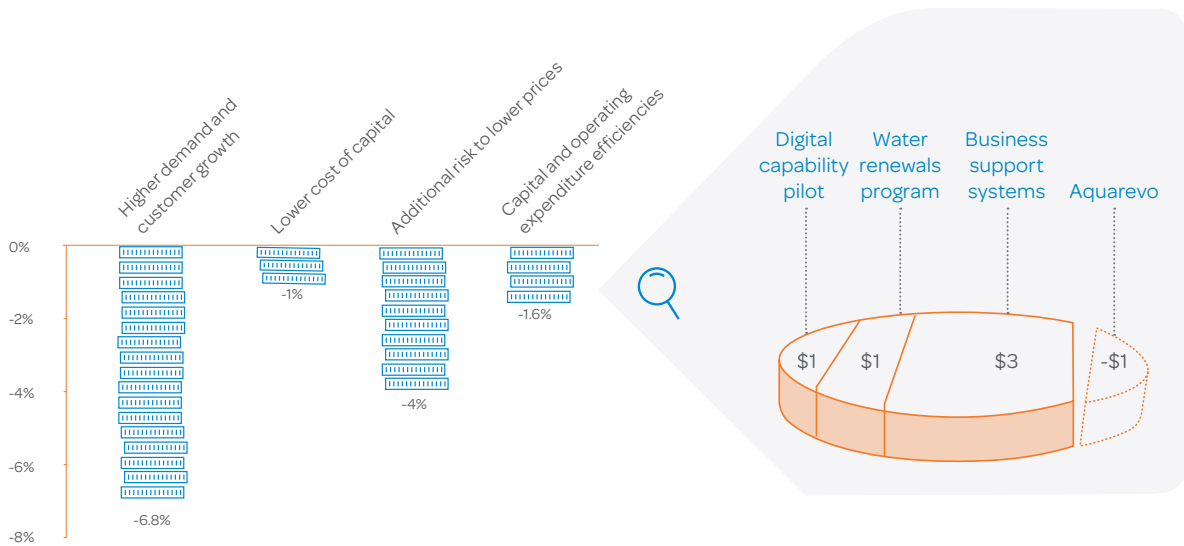
Although our customers have told us that they want us to improve our services, the amount they are willing to pay for this is limited to \$0 – \$5 a year (according to our bill simulator survey).

Therefore we have ensured that the delivery of key programs, central to the outcomes, remains within this scope, equating to a cost of \$4 per

annum for the average customer, or a 0.4 per cent average price increase.

To further reduce any financial impact on our customers, we will offset these program costs through other efficiencies to deliver an average 13.4 per cent price reduction, as highlighted in the figure below.

Fig 6 Breakdown of 2018-19 price reduction



Performance reporting

South East Water is committed to delivering on our five key customer outcomes during the next regulatory period by meeting the performance measures outlined in each section and delivering on our key programs and activities.

This is why we will report regularly on how we are tracking against these commitments, using our website and other forms of communication including the bill to keep our customers well informed






of our progress and performance – see Appendix 4 which provides a sample of how we will approach reporting back to customers. Prior to commencement of 2018-19 we will also develop performance target bands for each output measure.

In selecting our performance measures, we have ensured they can be easily understood by all – from the ESC to our customers – making us more accountable from all perspectives (refer to Appendix 5, which provides a

full set of performance measure definitions).

We also commit to our customers that if we materially underperform and do not deliver on the outcomes to the level we have promised, we will seek to address these through a form of financial penalty either during the period, or through the resetting of prices at the end of the regulatory period. The timing and the level of penalty will depend on the degree of underperformance across the five outcomes.

Table 18 Summary table: Key outputs and target to report against customer outcomes

Outcomes	Output measures	Current performance	2022-23 target
 <p>1. Get the basics right, always</p>	Percentage compliance with drinking water and recycled water standards	100%	100%
	Number of water quality complaints per 100 customers	0.18	0.18
	Number of customers receiving greater than 5 unplanned water supply interruptions	532	532
	Number of customers receiving 3 or more sewerage blockages	17	17
 <p>2. Warn me, inform me</p>	Percentage of customers notified per unplanned interruptions (for customers who have given us email/mobile details)	60%	80%
	Average duration of unplanned water supply interruptions	88 minutes	88 minutes
	Percentage of customers impacted by unplanned water supply interruption in peak times	28.1%	27.6%
	Percentage of planned water interruptions restored within notification period	98%	98%
 <p>3. Fair and affordable for all</p>	Operating cost per property	\$162	\$148
	Number of customers supported by South East Water Assist program	4,557	7,147
	Average level of debt upon entry to South East Water Assist program	\$925	\$800
 <p>4. Make my experience better</p>	Customer satisfaction – rating of 6 or above out of 10	81%	85%
	Value for money – rating of 6 or above out of 10	New measure	Committed to develop target by 2018-19
	Total complaints per 100 customers	0.43	0.37
 <p>5. Support my community, protect our environment</p>	Total net CO ₂ emissions	41,774	29,690
	Number of significant spills (dry weather)	20	20
	Percentage of customers in greenfield areas receiving recycled water	47%	77%
	Volume of alternative water as a percentage of total water used in designated greenfield areas	12%	20%

Guaranteed service levels

Our current guaranteed service levels (GSLs) have been in place for a number of years without significant change. During this current period we paid approximately \$0.12 million in GSL payments per annum, with approximately 70 per cent of those due to unplanned water supply interruptions greater than five hours, and 23 per cent for customers receiving greater than five unplanned water supply interruptions in a 12 month period.

To ensure that our GSL standards for the next regulatory period align with our five customer outcomes, we reviewed the measures we have in place to determine if they are still appropriate. We also considered whether additional GSL standards should be included to better reflect customer priorities.

During our customer engagement process, we asked customers what they thought. When it comes to existing GSL standards our customers generally support our current approach and current payment levels for each GSL.

They also supported the following additional GSL payments for:

- each water supply interruption beyond five in a 12 month period
- each interruption beyond three sewerage blockages in a 12 month period
- a higher GSL payment for internal sewage spills
- setting a GSL around significant sewer spills causing impact to the community.

Based on this feedback, we propose to retain our existing GSL standards, increase the payments to reflect 1 July 2018 dollars and include the following GSL standards:

- \$60 for every water supply interruption greater than five in any 12 month period, instead of the one-off payment at the sixth interruption currently in place
- A donation of up to \$10,000 to a local community group impacted by a spill caused by South East Water that results in a beach closure, to demonstrate our commitment to mitigating our impact on the local community.

This figure aligns to the penalty incurred for a beach closure from the EPA

- Increase the internal sewer spill payment to \$1,500
- Increase the unfair restriction GSL to \$500.

Customers also have a strong preference that South East Water immediately recognises fault through initiatives such as vouchers or being able to provide a donation to a community group. Where we fail to meet GSL standards during the next regulatory period, we will look to develop options to offer customers the choice of:

- a monetary credit on their next bill; or
- a voucher; or
- a donation made by South East Water to a community group of the customer's choice.

Based on customer engagement, the following table outlines our proposed GSL standards, updated to better align with our customer outcomes.

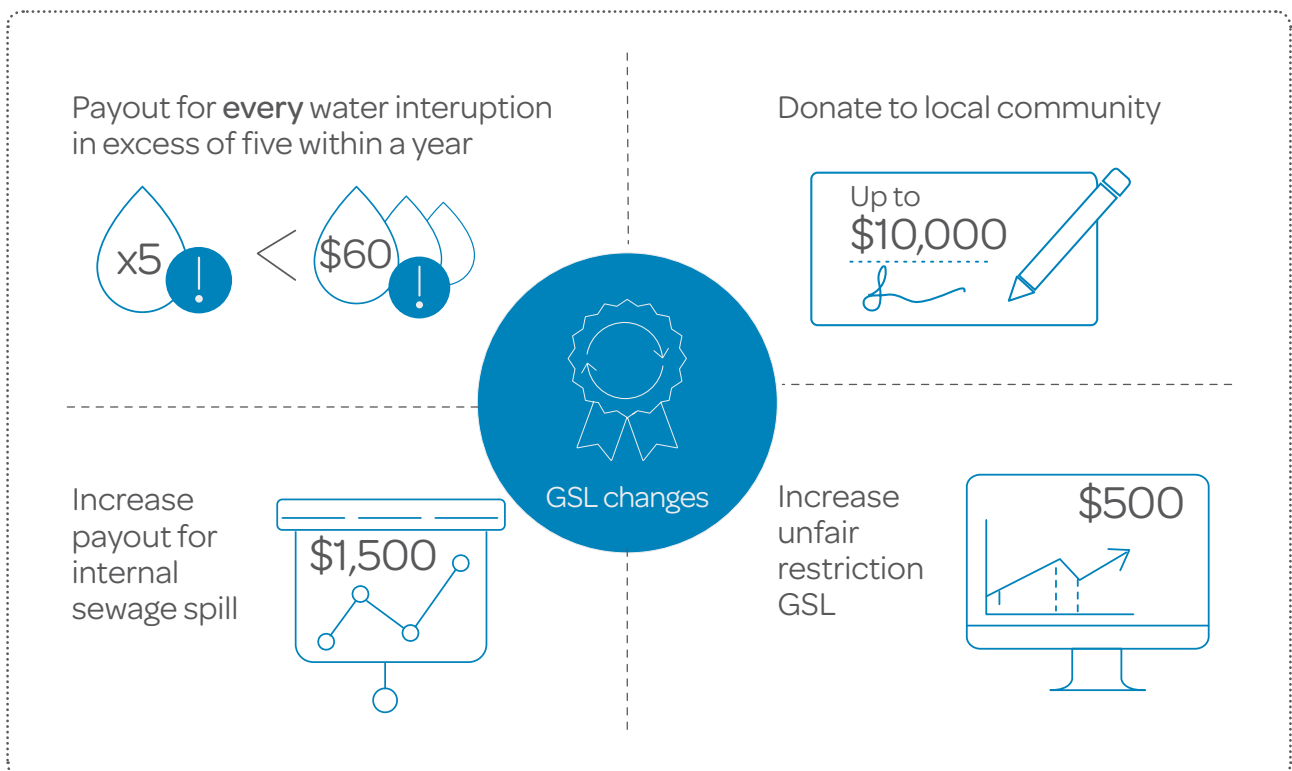






Table 19 Proposed guaranteed service levels

Outcomes	Current guaranteed service levels (GSL)	Current payments	Proposed change
 1. Get the basics right, always	More than 5 unplanned water supply interruptions in any 12 month period	\$50 one off	\$60 for every interruption where there is 6 or more water interruptions in any 12 month period
	Three sewerage interruptions during any 12 month period	\$50 one off	\$60 for every interruption where there is 3 or more sewerage interruptions in any 12 month period
 2. Warn me, inform me	Unplanned water supply interruption longer than five hours	\$50	Retain and increase to \$60
	Sewerage service interruption longer than four hours to restore the service	\$50	Retain and increase to \$60
	Sewage spill not contained within five hours of notification	\$1,000	Retain payment
	Sewer spill within the premises and we take longer than one hour to contain it	\$1,000	Increase payment to \$1,500 and alter to a sewer spill inside a premises caused by our infrastructure (i.e. inside), remove 1 hour threshold
 3. Fair and affordable for all	Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours (as defined by the ESC) to contact the customer and provide information	\$300	Retain and increase to \$500
 5. Support my community, protect our environment	No current GSL	N/A	A sewage spill caused by South East Water that results in a beach closure: pay up to a \$10,000 donation to a local community group impacted by a spill.

Based on these proposed changes, we forecast that the revised GSL scheme may require approximately \$0.2 million in payments per year, an additional \$0.08 million on current levels. We propose to not recover additional costs associated

with this revised approach, instead providing a greater incentive for the business to deliver on customer expectations and service levels. We consider that this revised set of service level obligations not only better aligns to our

customer outcomes, it provides greater accountability to deliver valued services and supports our 'Advanced' rating under the Risk category of PREMO.

Demand forecasts

This section outlines how we have determined demand across our entire service offering, including water, sewerage, trade waste and recycled water services. Robust analysis in this space is critical given its impact on pricing and ensuring fairness for our customers.

Demand forecasts are based on established methods scrutinised in previous price reviews, with

residential consumption forecasts generated through an end use model; and other key forecasts (customer numbers, sewage, recycled water and trade waste volumes/loads) produced through methods consistent with industry best practice (explained in further detail in the sections below).

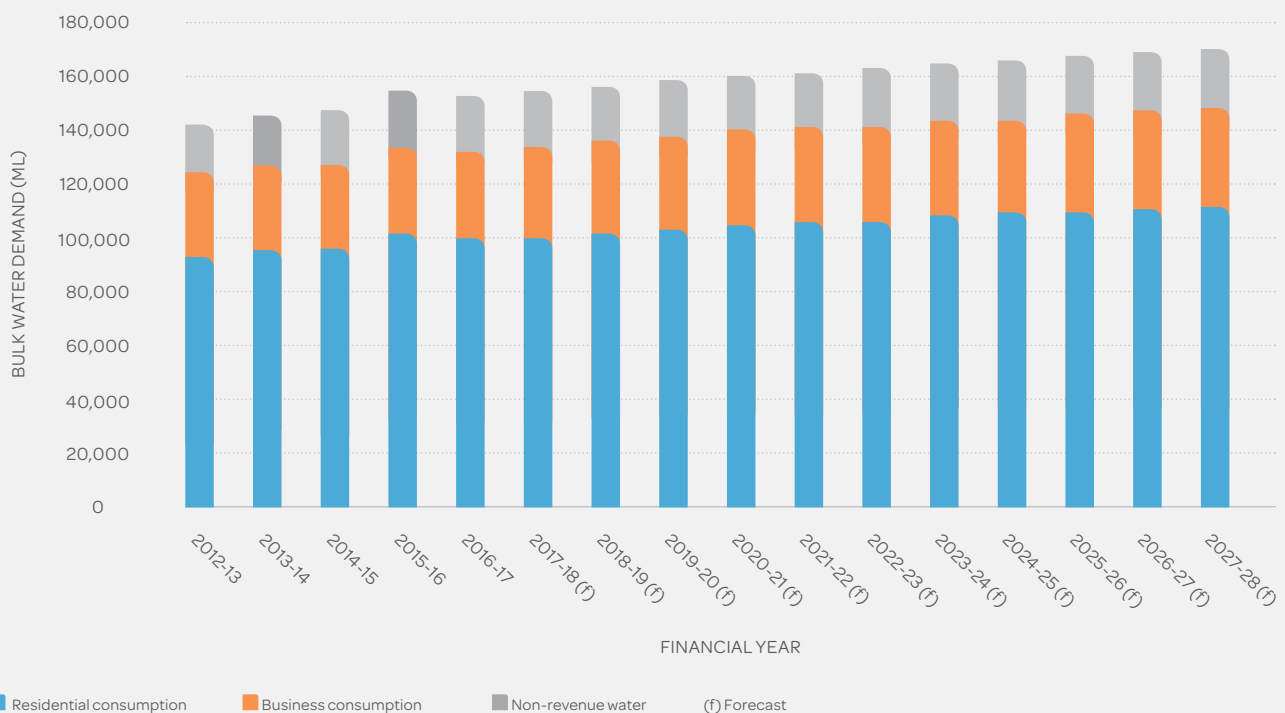
Some key trends we have built into our forecasts include:

- continued high growth in dwelling and population count

- moderate levels of efficiency improvements across some household appliances (end uses)
- reduced reliance on drinking water supplies.

The following figure shows the forecast trend for bulk water demand throughout the next 10 years, with overall demand increasing by approximately one per cent per annum.

Fig 7 Baseline bulk water demand (forecast and actual)



Learnings from the current period

For the current period, actual demand has exceeded forecast demand, particularly in 2015-16 where temperatures were some of the hottest and rainfall some of the lowest experienced in 25 years (which included the Millennium Drought).²

Our prices for this period were based on a relatively flat demand

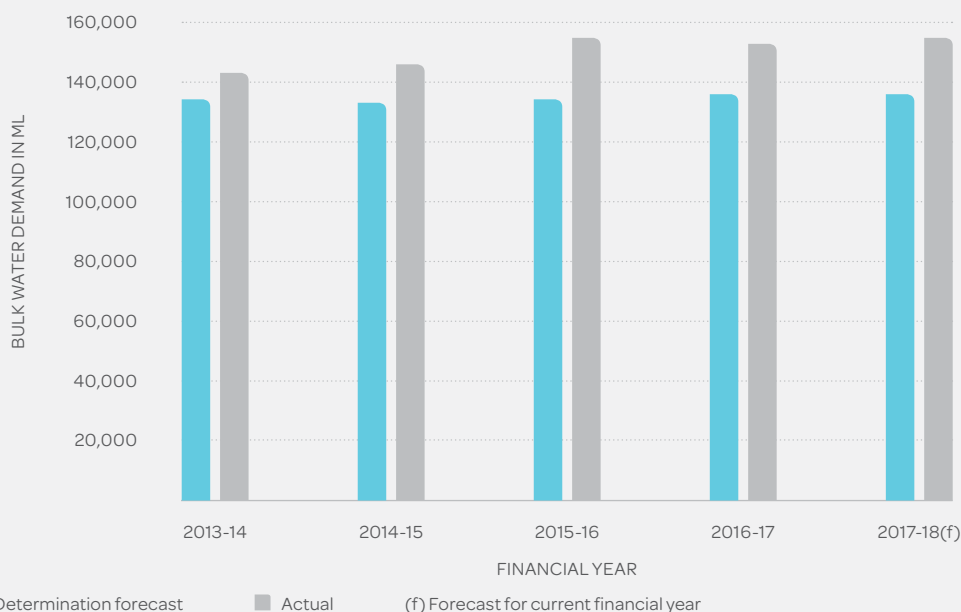
profile that allowed for some increase in usage following the end of restrictions, moderate customer growth, and efficiency improvements across household appliances. What we actually experienced was higher-than-expected customer growth and higher-than-anticipated water usage.

Overall, bulk water demand forecasts trend upward during this period (see graph) due to projected high population/

connections growth. However the increase in overall bulk water usage is somewhat countered by increased use of recycled water, continued use of rainwater tanks, and efficiencies in domestic appliances.

These learnings have been thoroughly considered as part of our demand forecasts for the next regulatory period, including in informing expected trends that will impact water usage.

Fig 8 Bulk water demand (ML) 2013-14 – 2017-18



Continued high growth in dwelling and population count

Understanding the predicted growth in population count and residential dwellings helps us to understand future water and sewage volumes and the infrastructure needed to support this. It's why we've undertaken significant research forecasting dwelling and population growth for the next regulatory period.

Historically, we've used Victoria in the Future (VIF) to forecast new customer growth; now, to help plan our demand forecasts and infrastructure needs and upgrades, we've sought a greater level of granularity by commissioning Spatial Economics (specialists in spatial demography) to develop detailed growth forecasts specifically for our service region.

Spatial Economics incorporated additional data sources into its modelling to allow for a more accurate spatial distribution of growth forecasts. The primary

data source for this work is the redevelopment database produced by the State Government Urban Development Program. As outlined in Figure 9, Spatial Economics forecast South East Water's growth to be approximately 4,000 properties per year higher than VIF predictions up until 2020-21.³

On the basis that it will provide a more accurate projection of customer growth during the regulatory period, we've used Spatial Economics' dwellings forecasts to inform our demand forecasting, revenue and infrastructure planning.

² Based on Bureau of Meteorology annual averages for rainfall and daily maximum temperature gathered from Cranbourne Botanic Gardens weather station 2015-16.

³ Residential Dwelling Construction Projections: 2016 to 2051 Established Area, Spatial Economics, April 2016. Residential Dwelling Construction Projections: 2016 to 2051 Casey & Cardinia, Spatial Economics, February 2015.

A substantial increase in higher-density living is forecast across our service area during the next regulatory period.

Currently, 36 per cent of dwellings in our service area are multi-unit dwellings. It's forecast that in the first three years of the next regulatory period, 72 per cent of new dwellings will be multi-unit and

this figure will remain high at 52 per cent for the following two years. By the end of the period this results in the percentage of total dwellings increasing from 36 per cent multi-unit dwellings (64 per cent detached) to 40 per cent multi-unit dwellings (60 per cent detached).

For South East Water higher growth in multi-unit dwellings:

- increases overall consumption forecasts (due to more dwellings and people)
- reduces consumption on a per connection basis (that is, total consumption divided by total dwellings declines due to the average multi-unit dwelling using less than the average detached dwelling).

Over time our customer base is shifting from detached dwellings to multi-unit dwellings, which reduces average usage per connection.

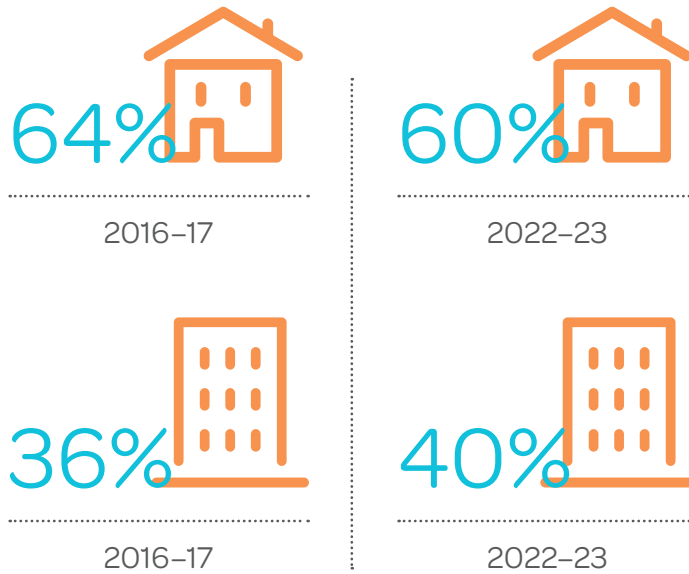
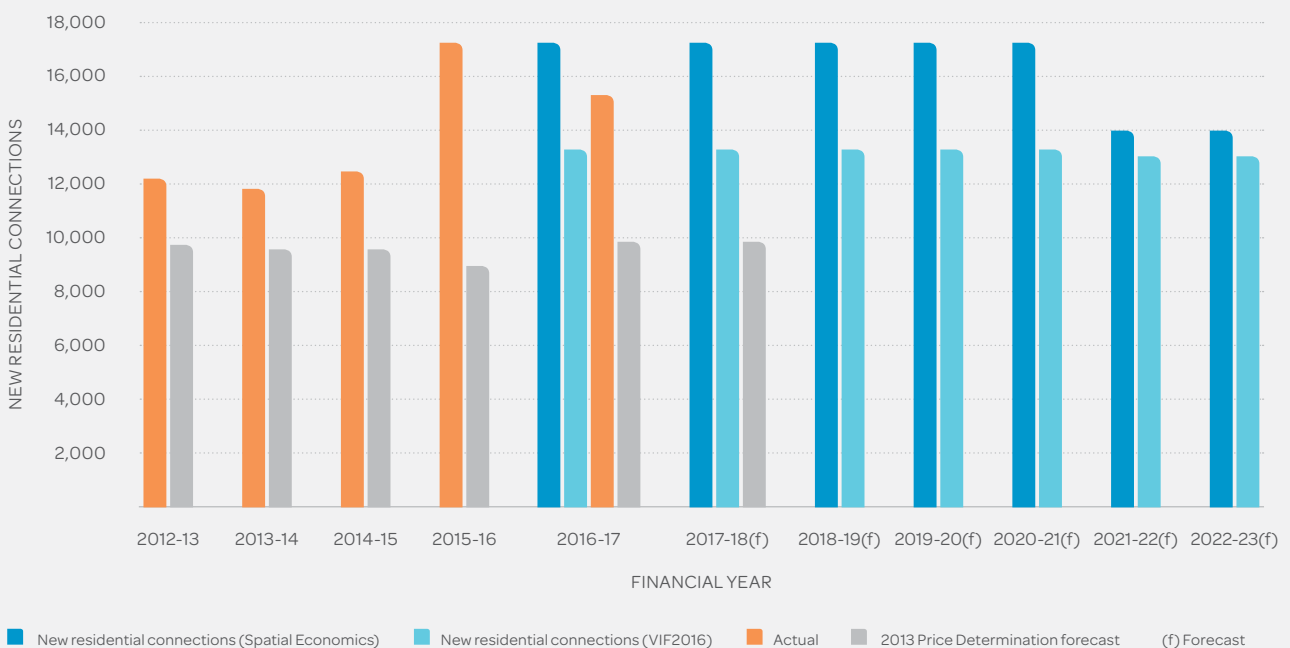


Fig 9 New residential connections (forecast and actual) 2012-13 – 2022-23



Approach to residential consumption

Within our service area, total residential drinking water consumption is forecast to grow by approximately one per cent per annum during the next regulatory period. This is less than customer growth, which reflects the take up of more efficient household appliances, increased use of alternative water supplies and smaller garden sizes. Residential demand is modelled by summing the estimated consumption for each end use for typical detached and multi-unit households. Key assumptions in our end-use modelling are based on a number of customer behavioural studies and research including:

→ Customer Usage and Affordability Research, conducted during 2016 and 2017, in which 168 digital meters were installed into a cross-section of residential customers' homes (including 78 households used as a control group to study behavioural patterns in consumption without interference)

- Melbourne Residential Water End Uses Winter 2010/Summer 2012,⁴ which measured the consumption of 337 homes across Melbourne with a view to using the data gathered to better understand domestic consumption
- Water Appliance Stock Survey and Usage Pattern Report 2012,⁵ which was jointly produced with the other Melbourne metropolitan water utilities and surveyed consumer appliance ownership and usage patterns. We also used data from a more recent study conducted in 2016 (and associated report⁶), with the results allowing for analysis of more up-to-date data.

Econometric forecasts were also developed to validate the results of our end use model forecast of residential drinking water consumption. The econometric forecasts used well-established methods involving dynamic panel data models for 26 distinct customer segments (based on dwelling type, property size, owner-occupied/tenanted, and with/without recycled water). The models quantified the impact

of weather conditions and seasonal variables on water use patterns and allowed us to estimate residential consumption under average weather conditions.⁷

To develop consumption forecasts, we were also guided by the state government's water efficiency policy. However, given the water efficiency projections already factored into our forecasts, no additional adjustments were made.

Detached dwellings

Usage per detached dwelling is forecast to be relatively flat with a slight downward trend due to efficiencies in some appliances, smaller lot sizes, and uptake of alternative water supplies in the growth areas in which it is available.

Drinking water consumption per detached dwelling is expected to decrease from 166 kL a year in 2018-19 to 161 kL a year in 2022-23. Total water consumption (comprising drinking water and recycled water) per detached dwelling is also expected to decrease from 169 kL a year in 2018-19 to 165 kL a year in 2022-23.

Fig 10 Total water usage per detached dwelling (kL/annum) 2013-14 – 2022-23



4. Melbourne Residential Water End Uses Winter 2010/Summer 2012 – Final Report, prepared by Smart Water Fund, published June 2013.

5. Water Appliance Stock Survey and Usage Pattern Report 2012 – Final Report, prepared by Smart Water Fund, published June 2013.

6. Appliance Stock and Usage Pattern Survey – South East Water 2016, prepared by South East Water.

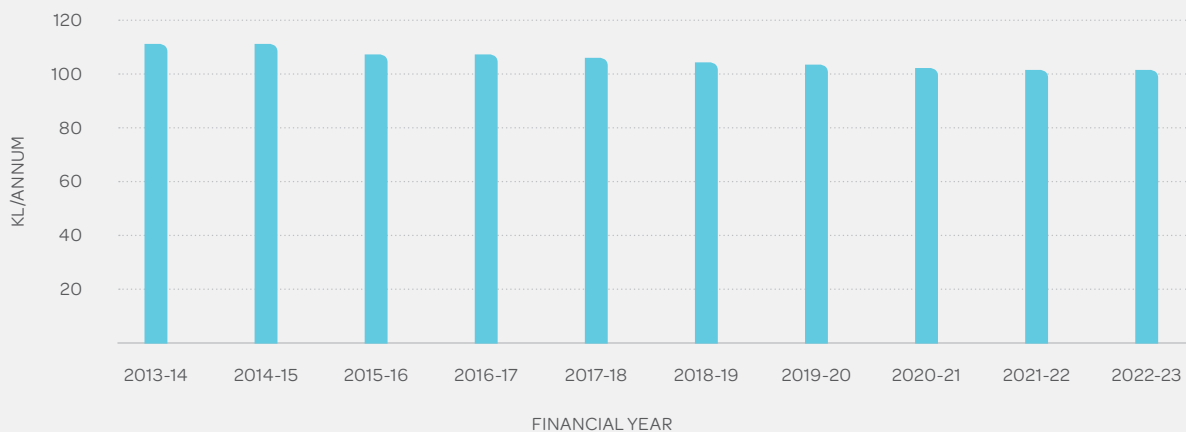
7. Econometric Modelling of South East Water's Residential Demand Forecast, prepared by Vasilis Sarafidis, September 2017.

Multi-unit dwellings

Drinking water usage for multi-unit dwellings also trends downwards due to efficiency improvements in household appliances.

Drinking water usage per multi-unit dwelling is expected to slightly decrease from 104 kL a year in 2018-19 to 101 kL a year in 2022-23, as outlined in the following figure.

Fig 11 Forecast water usage per multi-unit dwelling (kL/annum) 2013-14 – 2022-23



Business usage

Historically, business customer growth has been upward-trending; however, it does not necessarily move at the same rate as residential customer growth and may be impacted by other extraneous factors not

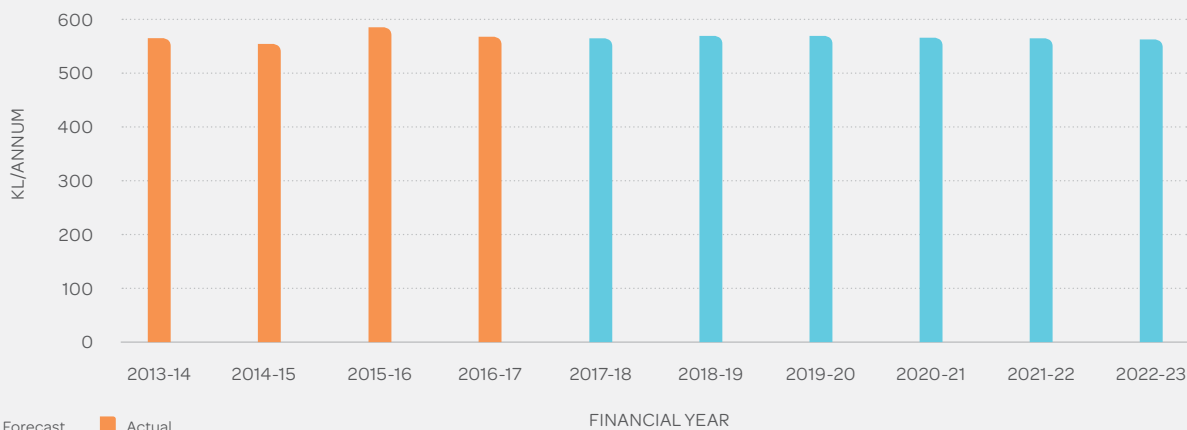
consistent with residential growth. For example, changes in patterns of production (e.g. resulting from industrial closures).

For the next regulatory period, we've forecast business customer growth to be approximately 1.23 per cent each year (based on average

business growth figures between 2013-14 and 2016-17).

To predict average business usage, we also took an average of the past four years' consumption per customer (568 kL each year), with a very small (0.25 per cent each year) efficiency built in, due to anticipated appliance efficiency.

Fig 12 Actual and forecast total business water consumption per customer (kL/annum) 2013-14 – 2022-23



Increased use of non-drinking water by business customers (such as Class A and Class C recycled water) is expected to reduce overall business demand for drinking water by approximately 100 ML a year.

Alternative water forecasts

We're committed to the continued expansion of our Class A recycled water network to provide greater alternative water access for our customers and to support long-term water security.

Residential recycled water growth is based on the assumption that homes with recycled water available use approximately 36 kL each year (based on average per connection across 2013-14 - 2016-17), mainly for garden and toilet use, and clothes washers in some homes.

Our alternative water supply forecasts for business customers are based on historical averages between 2013-14 and 2016-17 (91 ML), with growth projected based on business customer growth (approximately 1.2 per cent per year).⁸

Overall demand forecasts also assume that approximately 15 per cent of homes have a rainwater tank, with that figure rising very gradually, and that the annual yield of a rainwater tank is 20 kL a year based on average Melbourne weather conditions (rainfall and temperature).⁹

Price elasticity

Academic literature,¹⁰ customer insights and anecdotal observations indicate that price elasticity is not expected to be a considerable driver of demand; this is due to the low price elasticity of demand for water.

In the years following the implementation of the prices determined in the 2013 Price Determination, it was noted that where prices increased, demand increased too. For the

purposes of demand forecasting for 2018-19 and beyond, it is assumed the average bill reduction change between 2017-18 and 2018-19 will affect demand from 2018-19 onward. It also assumes that price elasticity for residential step 1 consumption is -0.05; for step 2 it is -0.1; and for business consumption it is -0.0925.¹¹

Sewage and trade waste forecasts

Consistent with our current approach, we will continue to base the sewage disposal charge (SDC) on an estimate of billable sewer volumes based on a single proportion of metered water volume. For houses this is 75 per cent and for units and flats 85 per cent). We also make adjustments for approximately 24,000 'water only' customers who do not discharge to the sewer.

Business billable sewage volumes are difficult to estimate as there is little consistency between business customers. For example, parks and gardens, commercial customers and trade waste customers all have different disposal patterns. As a result, a relationship between water consumption and sewage volumes has been derived for business customers based on historical averages between 2013-14 and 2016-17.

Trade waste volume forecasts are based on an average of 2013-14 to 2015-16 volumes, which are increased by a weighted average of the projected increases in residential and business sewage flows due to population growth. This method is used due to growth in trade waste loads being more closely correlated to population served rather than to water or sewage volumes.

Water supply and demand scenarios

In developing our demand forecasts, we've based our approach on the following key water supply and demand assumptions including:

- average weather conditions (understanding that in the short-term, weather conditions influence residential outdoor water usage habits and use of evaporative coolers, as well as some business uses)
- water restrictions being unlikely due to the Victorian Desalination Plant providing a buffer against low storage levels
- climate change having minimal impact during the next five to 10 years (and only up to five per cent throughout the next 50 years).

To enhance the robustness of our forecasts, we also considered a number of water supply and demand scenarios. These included:

- modelling differences in population/connections growth, particularly around connections forecasts
- analysing the possibility of alternative scenarios in growth, average temperatures and efficiency improvements including:
 - a 'high' scenario where a combination of higher growth, weak efficiency improvements, and hotter temperatures cause demand to exceed forecasts
 - a 'low' scenario where lower growth, strong efficiencies, and fewer than expected hot and dry periods cause lower than expected demand levels.

8. Growth includes organic growth (business customers requesting to be connected to the third pipe), connections of schools, councils and public areas, and potential new schemes.

9. Based on gradual growth since 2005 survey of 476 homes showed levels of 13 per cent.

10. Abrams, B., Kumaradevan, S., Sarafidis, V. and Spaninks, F., the Residential Price Elasticity of Demand for Water, Joint Research Study, Sydney, 2011.

11. Based on ACIL Tasman, Pricing for Water Conservation in the Non Residential Urban Sector, Smart Water Fund, February 2007.

Allocation of risk

Using forecasts from Spatial Economics will result in a price reduction of approximately 2.7 per cent to our customers, compared to prices that would have resulted using VIF forecasts.

As an essential services provider, we're prepared to accept and manage risk on behalf of our customers to help drive prices down.

We're realistic about customer growth in our region. Recent historical trends have confirmed that VIF forecasts (on which we've traditionally based our forecasts) may underestimate the amount of

growth in our region, meaning that in the past our demand forecasts have been based on conservative assumptions (with customers carrying more of the price risk).

We believe that by using Spatial Economics' forecasts for the next regulatory period, we have a more accurate and bespoke growth forecast specific to the uniqueness of our region. Spatial Economics' higher growth assumptions are based on sound data and are much more aligned to recent trends.

We think this is only fair given we're best placed to understand what's happening in our region and it further demonstrates our commitment to managing risk on

our customers' behalf so that they continue to get the best deal based on the most relevant data available.

Total demand forecasts

The following tables provide the forecast total number of customers who will receive water and sewerage service charges and forecast water, sewage, recycled water and trade waste volumes to formulate prices for the next regulatory period. In the regulatory period commencing 1 July 2018, we propose to remove the third water usage step and remove the residential recycled water service charge. These changes are reflected in our modelling and forecasts.

Table 20 Forecast customer numbers by tariff category

Customer numbers	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Number of water service charges – residential	676,069	693,291	710,514	727,737	743,330	757,294
Number of water service charges – business	51,963	52,689	53,425	54,169	54,922	55,685
Number of sewer service charges – residential	651,691	671,648	691,630	711,126	728,919	745,090
Number of sewer service charges – business	48,124	48,850	49,585	50,330	51,083	51,846
Trade waste risk rank 5	10,349	10,477	10,606	10,737	10,870	11,004
Trade waste risk rank 4	200	203	205	208	211	213
Trade waste risk rank 3	97	98	100	101	102	103
Trade waste risk rank 2	31	32	32	33	33	33
Trade waste risk rank 1	27	28	28	28	29	29
Recycled water service charges – residential total	13,415	N/A	N/A	N/A	N/A	N/A
Bunyip water service charges – residential	192	193	194	195	196	197
Bunyip water service charges – business	125	127	129	131	133	135
Fire service water service charges	19,316	19,602	19,889	20,175	20,462	20,748

Table 21 Forecast demand 2017-18 to 2022-23

Demand	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Residential step 1 (kL)	76,877,591	78,133,155	79,106,198	80,104,149	80,815,695	81,529,958
Residential step 2 (kL)	17,764,222	24,700,141	25,008,926	25,325,602	25,551,526	25,778,309
Residential step 3 (kL)	6,582,216	N/A	N/A	N/A	N/A	N/A
Business sales (kL)	33,421,259	33,999,511	34,333,006	34,669,772	35,009,841	35,353,245
Residential SDC (kL)	75,484,566	77,092,366	78,366,062	79,615,704	80,570,042	81,524,788
Business SDC (kL)	15,989,305	16,396,682	16,557,627	16,720,153	16,884,273	17,050,005
Trade waste (kL)	5,346,504	5,449,651	5,533,360	5,615,754	5,680,979	5,746,322
Billable Biochemical Oxygen Demand (BOD) (kg)	12,539,287	12,842,776	13,143,333	13,443,692	13,686,976	13,930,279
Billable suspended solids (kg)	4,367,276	4,470,457	4,570,872	4,671,100	4,752,138	4,833,192
Billable Total Kjeldahl Nitrogen (tkn) (kg)	630,375	645,328	659,922	674,493	686,277	698,064
Volume of recycled water – residential consumer (kL)	1,064,226	1,260,213	1,455,212	1,649,229	1,847,136	2,044,043

Operating expenditure forecasts

South East Water’s controllable expenditure includes the day-to-day costs of running our water and sewerage network and treatment plants (maintenance, electricity and labour), as well as customer service and billing.

Operating expenditure outside of our control includes:

- Melbourne Water’s bulk charges for collection and treatment of drinking water and treatment of sewage
- an environmental contribution made to the state government
- other licence fees and charges.

This section focuses on our proposed approach to controllable operating expenditure during the regulatory period commencing 1 July 2018. To develop our forecast we:

- used 2016-17 actual expenditure as a base
- undertook a comprehensive review of all activities and resource requirements.

Our proposed operating expenditure for the next regulatory period commits us to a continued focus on efficiency and ongoing, disciplined management of controllable operating costs. We are confident in this commitment, even with positive growth in our customer base and increasing input prices.

Based on this, we’ve forecast South East Water’s operating expenditure for the next regulatory period to be as follows:

The diagram shows a balance scale with two pans. The left pan is lower and contains a weight labeled '\$623M' with a label below it: 'Total operating expenditure 2018-23'. The right pan is higher and contains a weight labeled '\$124.5M' with a label below it: 'Per year on average'.

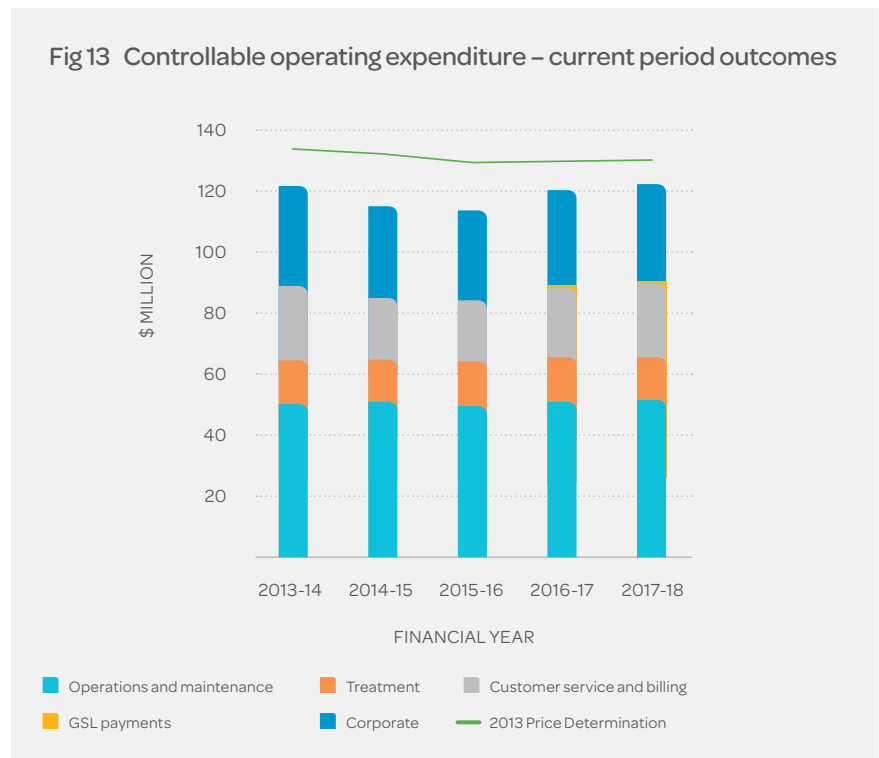
Current period performance

South East Water has delivered significant savings in the current regulatory period, with forecast operating expenditure \$44.8 million less than that approved by the ESC. This reflects our commitment to reducing total operating costs.

These cost savings (in capital and operating expenditure) were delivered under commitments made as part of the 2014 Water Sector Efficiency Review process. This included:

- adopting a new operations and maintenance model
- streamlining functions within the business
- introducing new technologies and innovations that helped to reduce costs.

The efficiency of our current period performance is demonstrated by metropolitan and national benchmarking studies.



Metropolitan benchmarking

South East Water benchmarks favourably against other metropolitan Melbourne water corporations.

This is evidenced in the *Victorian Water Sector 2015-16 Annual Report Review* issued by the Department of Environment, Land, Water and Planning; and in the *National performance report 2015-16: urban water utilities*, issued by the Bureau of Meteorology. In this, our operating expenses per property are the lowest of all comparable Melbourne water businesses.

National and international benchmarking

The Water Services Association of Australia commissioned Third Horizon (specialists in performance improvement strategies) to undertake a benchmarking study on the 2015-16 operating expenses of comparable water businesses. It shows that South East Water benchmarks favourably with similar water businesses – and when compared against 18 others including one New Zealand water business, we have \$74 million of operating expenses in the top two quartiles for efficiency.

Third Horizon identified several of our key spend categories to be in the top quartile for efficiency including operational

and maintenance expenditure, customer service and billing expenditure, and corporate functions – demonstrating the delivery of initiatives highlighted during the 2014 Water Sector Efficiency Review.

Specialised comparisons

When we compared our expenditure for information technology across Melbourne metropolitan water corporations for 2015-16, it showed that South East Water has the lowest operating and capital expenditure (representing expenditure that is the lowest as a value, as a percentage of revenue at 1.71 per cent and as expenditure per FTE at \$0.03).

Baseline operating expenditure

To assess South East Water's baseline controllable expenditure, we eliminated:

→ non-controllable expenses for bulk water charges

→ licence fees

→ the environmental contribution.

We also identified expenditure items that require adjustment for the next regulatory period, summarised in the following table.

Table 22 Operating expenditure items for adjustment, baseline 2016-17 – \$ million (1 January 2018 dollars)

Item	Description	Adjustment to the baseline year (\$M)
Customer engagement	Continued ongoing customer engagement (managed with remaining resources) during the next regulatory period. The adjustment relates to costs associated with customer research undertaken for this price submission.	-0.4
Safety	In the second half of 2016-17, additional safety officers were employed to roll out a board-approved safety strategy with a significant focus on ensuring the safety of all employees and the systems and processes of our contractors. The additional requirement relates to the six months where these costs were not incurred in the base year.	0.2
Long service leave	Abnormally low long service leave expense as a result of higher discounted rates used to revalue the long service leave provision after an unusually low discount rate for 2015-16. The adjustment is based on a variance to the average five-year trend and reflects an adjustment that would not be expected in future years.	0.4
Maintenance contract	Reflects higher contract costs for civil works that will be implemented prior to the start of the next regulatory period. The adjustment is the average increase in spend over the current regulatory period incurred by South East Water's contractor. Market tested rates indicate a \$1.2 million increase from base expenditure levels and we will manage the difference by seeking other efficiencies.	0.8

By applying these adjustments, we have included a further \$1.0 million in the baseline year.

Table 23 Calculation of baseline operating expenditure \$ million (1 January 2018 dollars)

	\$M
Baseline operating expenditure	645.5
Less non-controllable expenditure items	
External bulk water charges	494.9
Licence fees	1.1
Environmental contribution	29.2
Other non-controllable	0.4
Plus adjustments (as per 'operating expenditure items for adjustment' table)	1.0
Adjusted baseline operating expenditure	120.9

Growth rate and cost efficiency

Growth

Growth projections used to forecast baseline operating expenditure are consistent with projections used in the 'Demand forecasting' section of this submission. This ranges from 1.9 to 2.5 per cent during the next regulatory period.

Cost efficiency

To develop this price submission,

we undertook an extensive review process of activities and upcoming expenditure. In addition, our ongoing commitment to maintaining a focus on efficiencies will extend to optimising procurement, improving our business processes and continuing our focus on technology to leverage off existing and new data and digital capabilities.

On this basis, we propose a cost efficiency that matches growth in each year of the next regulatory period. We consider this provides

a reasonable balance between forecasting an ambitious level of cost efficiency and delivering on customer outcomes, and supports an 'Advanced' PREMO rating under 'Management' and 'Risk'. This assessment also considers our strong cost efficiency performance as reflected in benchmarking outcomes previously outlined.

Table 24 shows the summary of growth and efficiency built in to the operating expense forecast for each year of the next regulatory period.

Table 24 Growth and cost efficiency assumption 2018-19 – 2022-23

Assumption	2018-19	2019-20	2020-21	2021-22	2022-23
Growth	2.5%	2.5%	2.4%	2.1%	1.9%
Efficiency	2.5%	2.5%	2.4%	2.1%	1.9%

We also aim to absorb the following future costs in an effort to minimise expenditure to customers:

- Postage via Australia Post (75 per cent of bills are sent via mail each quarter). Efforts will be concentrated to continue migrating customers to eBills, in addition to delivering process efficiencies
- Additional information technology expenditure aligned with our Digital Transformation Strategy. An investment review process is in place involving key stakeholders across the business, to review, approve and prioritise

investments in technology to ensure that they meet efficiency benchmarks in order to progress

- Cost increases associated with forecast higher energy cost. South East Water will explore opportunities to take advantage of electricity purchasing models as they enter into the market as well as creating efficiencies at water recycling plants in order to offset.

Key programs to support our outcomes from the results of customer engagement will also be absorbed within current expenditure levels. This includes:

- implementing a coordinated communications approach to help customers better understand who we are and how what we do represents value for money.
- an enhanced vulnerable customer program (South East Water Assist)
- a dedicated program to collect customer data, so we can increase volumes of electronic notifications to keep customers more informed about planned and emergency works.

Cost allocation methodology

Operating expenditure is allocated to the services supplied on:

- a direct charge basis – where costs that relate directly to a specific service (water, sewerage and recycled water) are allocated in full to that service
- an indirect charge basis – where costs which are not directly related to a specific service are allocated based on the percentage allocation of direct costs to those services
- non-prescribed activity, which is removed for the setting of prices.¹²

Cost assumptions

Labour

42%

How much of our total controllable expenditure is assigned to labour costs.

In order for us to keep our operating costs low for our customers, we plan to maintain existing full-time equivalent (FTE) workforce levels, with any new initiatives or business requirements during the next regulatory period expected to be sourced by reallocating existing resources.

We will be able to do this with our consistent and ongoing focus on business improvement and investment in technology, which will both be used specifically in areas where process and time efficiencies can be made.

This approach to our workforce will deliver real savings for our customers with a eight per cent reduction in our labour costs per water connection during the next regulatory period.

No real price increases have been assumed for wages and anything above this will be funded through efficiencies, consistent with the Government Wages Policy.

Energy

3.5%

How much of our current total controllable expenditure is assigned annually to energy costs from water and sewage pumping and treatment operations, as well as our headquarters.

To develop energy volumes and costs for the next regulatory period, we:

- considered 2016-17 unit costs and applied an average two per cent growth in the volume of energy required to run our water recycling plants, pump stations and headquarters
- expect price increases in electricity, as per a 2017

Smart Power Utility study (commissioned by VicWater), will be offset by efficiencies within the business and proposed prices¹³

- recognised that the volatility and uncertainty regarding significant electricity prices should not be included in the revenue requirement.

Although we have forecast significantly higher electricity costs, we have not sought a step change for this. We believe the volatility and uncertainty surrounding future electricity prices, and the uncertainty regarding government policy, should not impact on customer prices at this stage. We also intend to explore further supply alternatives with renewable energy providers and use cost savings delivered through capital investment in solar and process efficiencies to offset forecasted price increases.

This approach also mitigates the risk of exposure to uncontrollable price increases in the electricity market – and therefore minimises the cost impact on our customers and their bills.

The following table provides a summary of our electricity forecast costs applied to existing volumes, plus expected growth for our water recycling plants, pump stations and offices (including the large-scale upgrade of the Boneo Water Recycling Plant). Expected energy savings to be delivered through our Capital Expenditure Program, in both solar power generation at water recycling plants and efficiencies in processes, will provide significant offsets in our electricity costs and are highlighted in the table below.

Table 25 Forecast electricity assumption 2018-19 – 2022-23 – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Forecast electricity costs (all sites) - no offsets	5.4	5.6	6.5	7.3	7.7
Forecast electricity costs (all sites) - including offsets	4.8	5.0	5.9	5.8	6.1

12. South East Water's Cost Allocation Methodology September 2017, can be provided on request.

13. Based on SCEP 5 Year Electricity Price Forecast, 2017, prepared by Smart Power Utility (commissioned by Vic Water).

Chemicals

1%

How much of our current total controllable expenditure is assigned to chemical costs each year.

Chemical expenditure is a small component of our controllable operating expenditure. It is important in ensuring we maintain our level of water quality for our customers as chemical costs largely relates to treatment of the water supply and the treatment of sewage at our water recycling plants. To develop chemical use forecasts for the next regulatory period, we:

→ assumed chemical unit costs will remain at current unit price levels

- considered the impact of population growth in our service area, which will see increased flow volumes through our water recycling plants (requiring a greater amount of chemicals to treat. We will manage this with existing expenditure levels)
- allowed for additional chemical requirements as a result of a major upgrade of our Boneo Water Recycling Plant in 2020 (for which we will seek additional funding through the step change process).

Table 26 Chemical cost forecast – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Total chemical cost	1.4	1.4	1.7	1.8	1.8

Information technology

8%

How much of our current total controllable expenditure is assigned to information technology costs each year.

Information technology (IT) supports almost all of the core business functions at South East Water; without continued investment, we will not be able to meet and maintain the needs of our customers or be able to achieve integrity of service levels.

While additional investments will be made in IT going forward, we believe that due to the generation of efficiencies through those investments, South East Water will

be able to manage current levels of expenditure – ensuring prudence in our investments into the future.

We recommend that IT expenditure remains constant during the next regulatory period, with the exception of information security costs proposed as a step change. The proposed expenditure will ensure reliable systems that continue to drive improvements and facilitate a more efficient service delivery.

Table 27 Information technology cost forecast – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Total information technology costs	9.9	10.0	10.0	10.2	10.2

Step changes

In assessing step changes for this submission we:

- undertook an extensive review of South East Water's operating cost requirements for the next regulatory period
- ensured step changes were consistent with the ESC guidance paper requirements.

We consider that the following items meet the criteria for a step change for the next regulatory period. They all relate to new operating expenditure as a result of capital expenditure projects.

Aquarevo

As part of our commitment to supporting a sustainable community (see 'Outcome 5: Support my community, protect

our environment'), Aquarevo will demonstrate the principles of integrated water management (IWM). These include carbon neutrality and other sustainable, environmental, social, community and economic benefits. Its purpose is to integrate all available water sources into homes to minimise demand on drinking water, and demonstrate intelligent network technologies and local sewage treatment to showcase how a closed loop system can work.

Villawood Properties is responsible for development costs and risks under the terms of our agreement, while South East Water contributes the land and infrastructure required to deliver IWM solutions to residential customers.

Sitting alongside these trial opportunities are risks associated with introducing innovative energy and water-saving solutions and initiatives. For Aquarevo, risks that require mitigation include health, and potentially reputational, risks - particularly associated with implementing rain-to-hot-water systems and regular water testing, audits and maintenance at the development's onsite water recycling plant (for which we are responsible). Forecast costs of this testing and maintenance program are outlined in the following table.

Table 28 Costs relating to Aquarevo – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Operating costs	0.4	0.7	0.8	0.7	0.7

Lang Lang Water Recycling Plant upgrade

Works have been completed to our Lang Lang Water Recycling Plant, which has been upgraded to a combined mechanical treatment plant and Class A recycled water facility. This upgrade allows us to service the residential growth areas of Koo Wee Rup and Lang Lang and also support South Gippsland Water in servicing the townships of Poowong, Loch and Nyora. As a result of this upgrade, an additional \$0.3 million per annum (not included in the baseline year) is required for ongoing operation of this facility.



Table 29 Costs relating to Lang Lang Water Recycling Plant upgrade – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Operating costs	0.3	0.3	0.3	0.3	0.3

Boneo Water Recycling Plant upgrade

It is forecast that the permanent population and sewage loads within the Boneo Water Recycling Plant catchment will increase by 50 per cent during the next 15 years. This volume increase is due to growth by infill in the catchment area and future backlog connections being connected to

the sewerage network. In addition, the catchment is heavily populated during summer holiday periods, requiring the plant to treat large volumes of wastewater during this peak time.

The capital solution selected for the plant's upgrade is the most cost effective, as there will be a number of efficiencies realised from energy

requirements (through solar installations and efficiency offsets). There are additional costs resulting from the upgrade comprising electricity, maintenance, chemical and other direct costs. The additional electricity and chemical costs are included in their respective summaries.

Table 30 Costs relating to Boneo Water Recycling Plant upgrade – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Operating costs	0.0	0.0	0.9	1.2	1.2

Security in IT

The Victorian Commissioner for Privacy and Data Protection has mandated that by 2018, all Victorian public sector organisations that manage personal information are required to have a protective data security plan. To achieve this, it is critical that we:

- continue to increase, update and strengthen information security controls and support systems
- allow for additional, ongoing maintenance costs for these systems, so we have the ability to manage our security environment against advanced and emerging security threats.

We also plan to introduce new, proactive holistic security monitoring and detection capabilities via a security operations centre.

We therefore propose a step change increase of approximately \$1.6 million for the regulatory period commencing 1 July 2018.

Table 31 Security in information technology – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Operating costs	0.2	0.3	0.3	0.4	0.4

Uncontrollable costs

Melbourne Water bulk charges

Bulk charges paid to Melbourne Water currently comprise 77 per cent of our total operating expenditure. For the regulatory period commencing 1 July 2018, we have assumed that Melbourne Water's bulk charges will remain in line with its 2016-21 Price Determination. For the final two years of this 2018 Price Submission, we have assumed that 2020-21 bulk charges will apply.

Environmental contribution

South East Water currently makes an annual contribution to the Department of Environment, Land, Water and Planning (DELWP), funds initiatives which promote the sustainable management of water.

DELWP has advised that the environmental contribution (until 30 June 2019) will be based on five per cent of a water corporation's water and sewerage revenue, representing \$40.9 million for South East Water. This will result in a 46 per cent increase in the environmental contribution.

Licence fees

Licence fees consist of regulatory charges incurred from the ESC, Department of Health and Human Services and EPA Victoria. These regulatory fees are assumed to remain constant (with the exception of the ESC with cost escalations forecast in the fourth and fifth years of the next regulatory period and the five years beyond that).

Water entitlement fees

As a holder of water entitlements within the Goulburn River and Murray River systems, South East Water is required to pay Goulburn Murray Water fees relating to bulk water entitlements and storage charges during the next regulatory period.

Allocation of risk

As an essential services provider, we're prepared to accept and manage risk on behalf of customers to help drive prices down.

Reliable benchmarking across similar water business in Australia and New Zealand consistently places us in the higher performing and most cost-efficient segments (see 'benchmarking') – demonstrating our proven ability to manage this cost risk on behalf of our customers to a very efficient level.

The ESC has indicated that a one per cent efficiency improvement rate would align to a standard submission. We're prepared to commit to a cost efficiency that matches growth per annum (approximately 2.5 times that of the ESC's hurdle rate), which allows us to continue to drive prices down while still delivering on a suite of customer outcomes.

We think we're well placed to manage this risk on behalf of our customers by exploring business process improvement initiatives, optimising procurement processes and continuing our focus on efficiencies by enhancing our technology and digital capabilities.

Additionally, as outlined, a number of costs are projected to rise during the next regulatory period, such as wages, postage, energy and costs associated with IT. We don't plan to include these in our cost recovery; we will seek ways to absorb them through better management of internal processes or driving efficiencies through the contracts we have in place with our service providers.

The following tables provide a breakdown of total controllable operating expenditure, showing both breakdown of step changes in table 32 and by key activities in 33.

Table 32 Baseline controllable operating expenditure incorporating step changes – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Baseline	122.6	122.6	122.6	122.6	122.6
Step changes					
Maintenance – Aquarevo	0.4	0.7	0.8	0.7	0.7
Lang Lang Water Recycling Plant	0.3	0.3	0.3	0.3	0.3
IT security	0.2	0.3	0.3	0.4	0.4
Boneo Water Recycling Plant	-	-	0.9	1.2	1.2
Total	123.5	123.8	124.9	125.2	125.2

Table 33 Total controllable operating expenditure by activity – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Operations and maintenance	52.7	53.0	53.1	53.0	53.0
Treatment	14.4	14.4	15.4	15.7	15.7
Customer service and billing	23.3	23.3	23.3	23.3	23.3
GSL payments	0.1	0.1	0.1	0.1	0.1
Corporate	33.0	33.0	33.0	33.1	33.1
Total	123.5	123.8	124.9	125.2	125.2

Capital expenditure forecasts

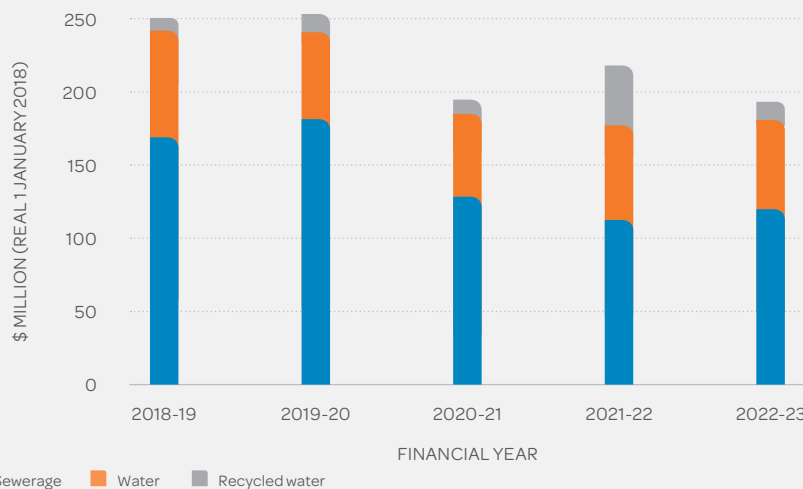
This section focuses on our approach to developing prudent and efficient capital expenditure forecasts to deliver on the five key customer outcomes detailed in this submission.

To develop our Capital Expenditure Program we:

1. identified the long-term growth and renewals required in our water and sewerage networks, including water recycling plants
2. assessed detailed investment needs for the next regulatory period.

Our capital expenditure largely consists of programs to provide services to new development areas and to ensure service reliability for all customers across our drinking water, recycled water and sewerage networks.

Fig 14 Forecast expenditure by service during the next regulatory period






\$1.112M

Our forecast capital expenditure for the next regulatory period

Current period outcomes

Throughout the current regulatory period, South East Water’s capital expenditure has focused on delivering water and sewerage systems that support:

- 

Customer growth
Water recycling plant upgrades, expansion of our water, sewerage, and recycled water networks
- 

System reliability
Asset renewal
- 

Environmental health
Sewerage backlog programs, in particular Peninsula ECO.

It also included establishing a new headquarters in Frankston, the heart of our service area.

Figure 14 compares actual expenditure during the current regulatory period with expenditure included in ESC’s 2013 Final Determination. It shows that expenditure during the current period is \$290 million less than was allowed.

This expected variance is largely due to:

- Peninsula ECO being delivered \$100 million less than expected due to innovations in technology and contracting. OneBox® technology enabled a reduction in the number of proposed major pump stations from seven to three, while a new contracting model provided lower overheads and higher productivity rates. Cost savings have been returned to customers through a reduction in connection costs

- favourable market conditions and a new capital delivery model resulting in reduced unit costs across all aspects of our Capital Expenditure Program, as illustrated by delivery of our Cranbourne Recycled Water Tank for 30 per cent lower than forecast. Total savings have been estimated at \$60 million
- delaying a capacity upgrade to the Boneo Water Recycling Plant until the next regulatory period, by implementing interim works and operational changes, and taking on additional risk of plant compliance.

Cost savings from improved market conditions and the deferral of projects have been returned to customers through the 2014 Water Sector Efficiency Review.

During the current period we delivered nine of the 10 major capital projects that were part of our expenditure forecast, the exception being the Boneo Water Recycling Plant which was delayed to the next regulatory period by implementing operational changes and short-term modifications. The majority of these projects were delivered within the estimated accuracy of time and budget as shown in the table below. As would be expected, approximately half of the projects came in under forecasts at the time of the 2013 Price Determination. Delivery of these projects demonstrates that South East Water is capable of, and historically has, delivered major capital works on time and on budget.

Fig 15 Capital expenditure, current period outcomes – \$ millions (1 January 2018 dollars)

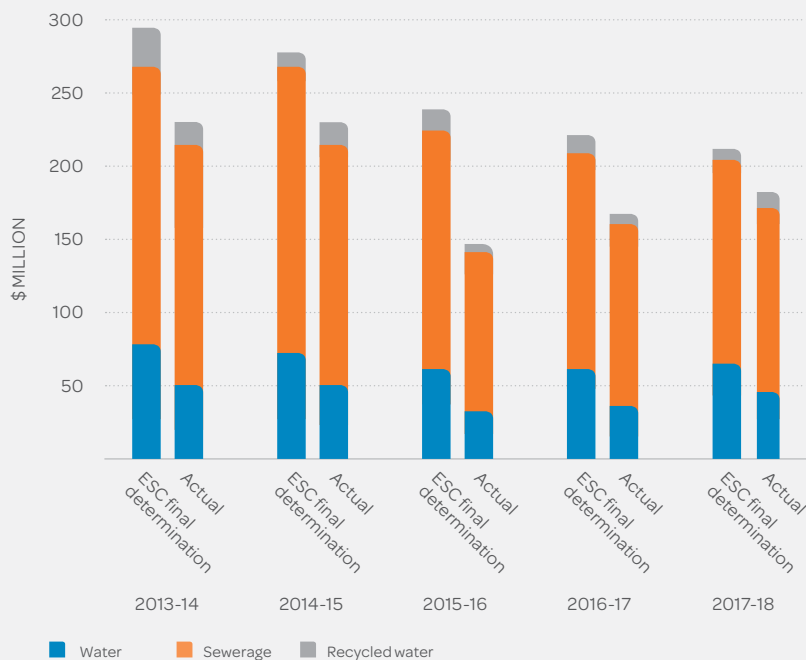


Table 34 Delivery of 2013-18 major capital projects

Project	Completed on time	Completed on budget	Comment
Rye – Portsea Backlog Scheme (Peninsula ECO)	✓	✓	Delivered 19 months early with 30% saving on P50 estimate
Boneo Water Recycling Plant capacity upgrade	<i>Delayed until regulatory period commencing 1 July 2018</i>		
Mt Martha Water Recycling Plant long-term sludge upgrade	✓	✓	18% over P50 estimate, but included expanded scope
Lang Lang Water Recycling Plant upgrade	✗	✓	Delivered more than six months late, 15% over P50 estimate but included expanded scope
Sewer Mains Renewal Program	<i>Ongoing</i>	✓	Delivered with 19% efficiency gain, unit rate savings included in forward projections
Water Mains Renewal Program	<i>Ongoing</i>	✓	Delivered with 6% efficiency gain, unit rate savings included in forward projections
New headquarters and fit out	✓	✓	15% over P50 estimate, but included expanded scope
Sewer Rising Mains Renewal Program	<i>Ongoing</i>	✓	Delivered under forecast
Pound Road Sewage Pump Station	✓	✓	13% over P50 estimate
Cranbourne Recycled Water Tank	✓	✓	Delivered 30% under P50 estimate

✓ **OUTPERFORMED TARGET** – Completed in line with, or before, time forecast/under P50 estimate

✓ **WITHIN RANGE TARGET** – Completed within six months of forecast/within accuracy of P50 estimate

✗ **TARGET NOT MET** – Completed six months after forecast/outside of accuracy of budget estimate

Capital planning and delivery at South East Water

We have sought to align our asset management systems with ISO 55001 to ensure our strategic objectives are delivered efficiently and effectively.

South East Water develops and maintains asset management plans for water, sewerage, water recycling

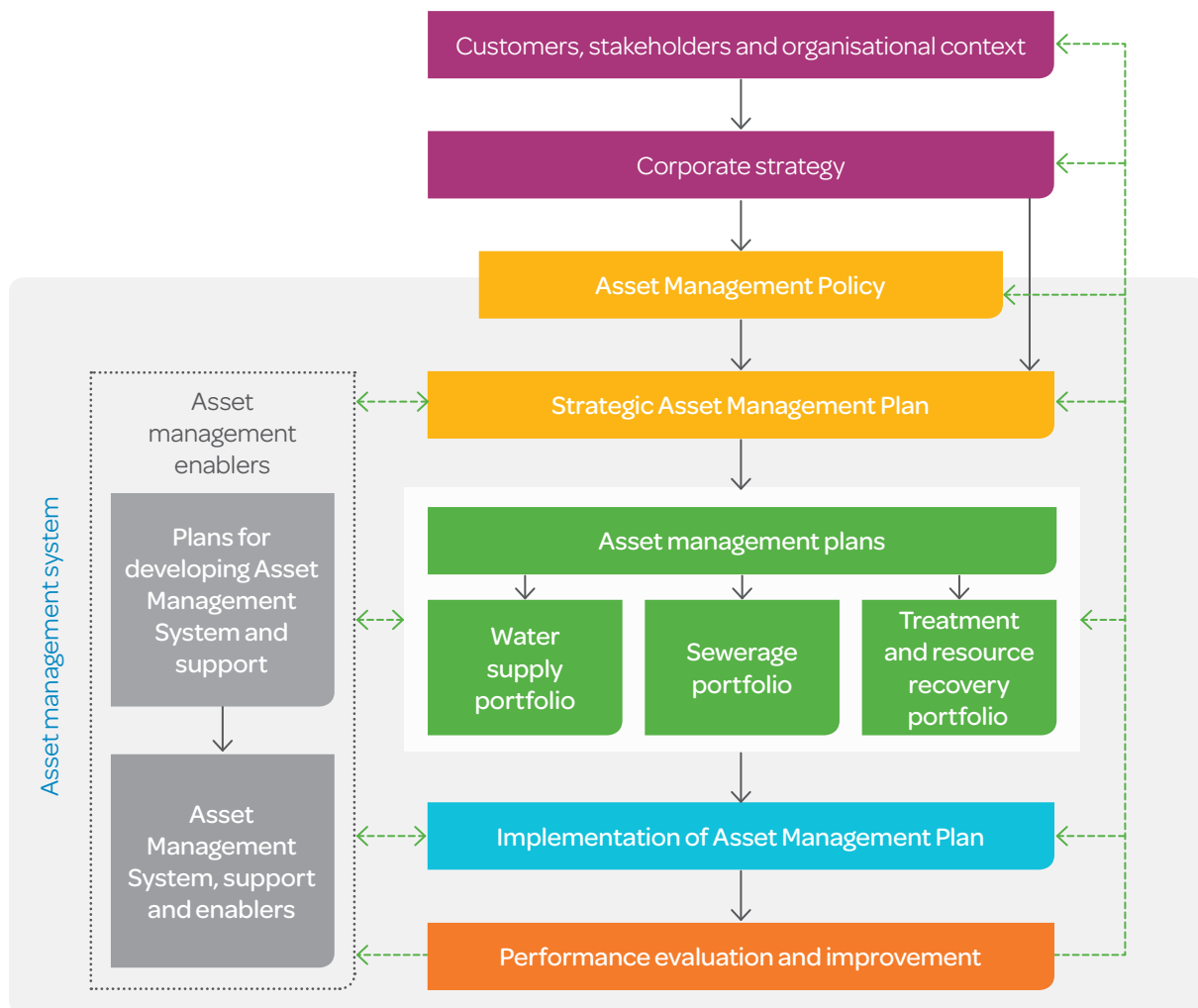
plants and supporting assets in alignment with asset management framework, see figure 16. These plans define the activities that will be implemented and the resources that will be applied to meet the asset management objectives. The forecast expenditure, culminating in the Capital Expenditure Program, has been developed against individual asset management plans.

The objectives of individual plans are set to deliver acceptable levels

of service based on customer input or regulatory requirements.

The proposed expenditure is optimised in consultation across the business with all plans reviewed by our internal Asset Management Committee. The costs against each individual plan have been amalgamated to form the Capital Expenditure Program, which has then been reviewed by our Asset Strategic Group, executive and board.

Fig 16 Asset management framework



To put the asset management framework into practice, there are many considerations that inform the planning process. Table 34 describes how South East Water

approaches some of these considerations, how we have delivered customer value, and how we will continue to do so. Through the asset management planning

process we ensure that customer service outcomes are delivered at the lowest cost and that capital expenditure is demonstrably prudent and efficient.

Table 35 Delivering on customer expectations value through asset management planning

Approach	Examples, both historically and in the next regulatory period
<p>Alignment with customer input</p> <p>South East Water has an ongoing commitment to align expenditure to our customers' expectations.</p>	<p>→ The Sewer Backlog Program has been heavily influenced by customers, including the Peninsula Early Connections Option backlog scheme (Peninsula ECO) which provided the opportunity for customers to pay an additional amount for a significantly earlier connection.</p>
<p>Long-term thinking</p> <p>By planning and thinking ahead, options can be possible that would not otherwise be viable. For example, staged solutions and anticipatory actions.</p>	<p>→ For the Hanna Street sewerage capacity improvement project in Southbank, a pump station is being built with initial capacity sufficient for an interim period, but designed to enable easy upgrade once projected growth has occurred.</p>
<p>Capital and operating expenditure substitution possibilities</p> <p>To deliver lowest cost servicing solutions, analysis and business cases need to consider the full lifecycle of an asset and not focus on reducing capital or operating expenditure at the expense of the other.</p>	<p>→ Development of pressure sewerage systems allows direct comparison between a higher capital cost option (gravity sewerage) and a higher operating cost option (pressure sewerage). This has allowed significant cost savings for the Sewerage Backlog Program in some growth areas compared with conventional servicing solutions. We now directly compare these options when assessing new sewerage schemes.</p>
<p>Hydraulic modelling</p> <p>Being able to predict the flow rates that a network of pipes and other structures can accommodate is important for planning what specific elements need to be upgraded and at what point in the projected growth.</p> <p>We have developed hydraulic models for each sewer catchment and water supply zone, with the ability to conduct stress-tests that predict performance in varying conditions.</p>	<p>→ The drinking water supply system has been hydraulically modelled to confirm it has adequate capacity to convey peak day and peak hourly demands and maintain service levels to customers.</p> <p>→ Hydraulic modelling outcomes are interpreted according to the context. For example, the model may predict pressure below the ideal minimum for customer service levels on a peak day, or sewage causing surcharging on a regular basis, but a risk-based approach is taken as to whether an upgrade is required or not.</p>
<p>Asset lifecycle modelling</p> <p>Predicting failure of pipes that are underground and—in the case of some older assets—with limited construction records, can be difficult to forecast. We have developed a number of sophisticated models to address the need to predict asset failure, both to plan cost-effectively and to minimise impact in the event that failure does occur.</p>	<p>→ For the Water Mains Renewal Program, water mains are renewed when it is necessary to meet customer expectations with respect to repeat interruptions. South East Water partners with universities and other authorities improve asset lifecycle modelling outputs, and understanding of asset life, to ensure we develop an optimised program</p>



The Peninsula ECO project supports customers from a locally-based connections and information centre in Rye.

Real data to support forecasts

Asset data: a number of techniques are used to gather asset data that forms the basis of capital expenditure forecasts. These include condition monitoring and sampling, supplemented by an increasing volume of high quality historical records amenable to analysis.

Customer data: usage patterns that inform our design standards are not static. We re-appraise customer usage to ensure asset requirements are appropriately defined.

- For the Customer Metering Program, a sample of meters are tested annually in order to predict which meters need replacement to ensure compliance regarding their accuracy.
- Condition monitoring is used in the Water Recycling Plant Reliability Program to identify assets (such as pumps) that are showing early signs of wear. Readings are used in conjunction with statistical profiles. Condition monitoring is also used to predict the need for sewer renewals.
- For critical sewers (for which no level of failure is acceptable), a proactive management strategy is adopted. This is based on understanding and tracking the condition of these assets using predictive/deterioration modelling and condition assessment (including CCTV, screening assessments and specialised advanced techniques).
- In 2014, our flow rate assumptions for drinking water were reviewed and revised downwards by 25 per cent leading to updated design standards that allow significant downsizing of infrastructure requirements.

Growth projections (forecast demand) by specialists

Experience has taught us that high level projections can mask significant local variation and that councils and developers can have widely differing views.

- For the purpose of planning capital expenditure for the next regulatory period, we commissioned Spatial Economics, a company that specialises in spatial demography, to develop detailed growth forecasts for our region. Details of its work is described in the 'Demand forecasts' section.

Innovation in design

We have earned a particularly strong track record in innovation that continues today.

In some instances, innovation accompanies an increased acceptance of risk by our corporation.

- The Peninsula ECO project has been delivered at a significantly lower cost than forecast, with OneBox® technology enabling a reduction in the number of proposed major pump stations from seven to three.
- By taking on more risk associated with security of supply (for drinking water), an alternative solution for customers in Cranbourne, Carrum Downs, Chelsea and Mornington was adopted, leading to savings estimated at \$10.7 million during the next regulatory period.

Innovation in delivery model

We have learned from experience the value that can be delivered by ensuring that the capital delivery model is aligned to the forecast program of works. Implementing an appropriate delivery model is a key component of efficient and effective infrastructure management.

At the start of the current regulatory period we changed our delivery model to optimise alignment between the forecast program and the opportunities and risks available through alternative contract models. Our capital delivery models all provide for competitive contracting:

- Large projects will be delivered through a model that is determined on a case-by-case basis since each is unique and can be expected to require customisation.
- Other assets will be delivered through four core programs: backlog, connections, renewals, and pipes and structures. Each has its own particular delivery model designed to address the relevant objectives.
- Our principal maintenance service requirements can be categorised into four streams: water civil, sewer civil, sewer cleaning, and mechanical and electrical.

These delivery models have been the subject of recent reviews and will continue in their current forms into the early years of the next regulatory period.

Cost estimates are likely cost

For the capital projects forming the Capital Expenditure Program, estimates are based on P50 estimates or equivalent.

- Costing of programs has been based on unit costs derived from the following:

- Maintenance works and operational activities – current direct cost performance by maintenance contractors
- Capital works that are the subject of ongoing contracts are based on the current rates in those contracts
- The Benchmark database, which was established to track actual water and sewerage project costs from various sources.

The Benchmark database provides cost estimates within the 25–50 per cent range for projects at the conceptual stage, in line with our capital investment approval process. This order of accuracy is consistent with the level of engineering and estimating effort available at early stages of project development, and align to the equivalent of a P50 estimate.

Challenging regulatory requirements

We operate in an environment where the services we deliver, and how they are delivered, are shaped by a number of regulatory authorities. Through appropriate engagement we have delivered regulatory outcomes while achieving better value for customers.

- It has been historically cost prohibitive to cater for additional inflows at our Longwarry Water Recycling Plant, with discharge to local waterways not permitted. Through scientific analysis and negotiations with EPA Victoria we have succeeded in having these discharge requirements relaxed. This enables continued viability of the plant, which represents the lowest cost servicing solution to the local townships while maintaining local waterway health.

Building digital capabilities

In line with customer expectations we will further develop our digital capabilities with an emphasis on data acquisition and analysis to:

- enhance customer interactions
- optimise our water and sewerage network operation
- support integrated water initiatives for new developments at Fishermans Bend and Aquarevo.

Enhancing our digital capabilities relates directly to all five of our customer outcomes.



1. Get the basics right, always

Our network monitoring currently comprises several hundred locations; going forward we will obtain near-real-time information from meters, manholes, fire hydrants and sewer points. This will provide a more complete picture of the state of our network and give us the ability to better respond to planned or emergency outages. It will also allow us to minimise energy consumption, maximise asset life and more reliably predict future performance.



2. Warn me, inform me

We will significantly increase monitoring across our water and sewerage network allowing for remote and early detection of localised faults. This will enable us to initiate corrective works earlier, and provides an opportunity for us to connect with our customers in real-time, to let them know about any interruptions and ongoing repairs.



3. Fair and affordable for all

Detailed real-time information on water use will promote more efficient water use behaviours and enable our customers to ensure their water bills stay on track. Efficiencies driven by digital capability in other areas of our business will also help to keep bills down (including an enhanced ability to detect system leaks).



4. Make my experience better

The availability of real-time data regarding water use opens up more opportunities to support our customers and enhance their experience, including the potential to send bills more frequently than on a quarterly basis, and through enhanced online self-management and information portals that improve ease of access.



5. Support my community, protect our environment

Digital technologies can reduce the impact on drinking water supplies by providing customers with the ability to better monitor and manage water use, enhance leak detection in our network and on customer properties, and identify potential sewerage network issues early.

How we're making the change

Building our digital capability impacts three key capital expenditure areas.

1. Business support systems

Expenditure has been increased by \$44 million primarily to build the IT platforms that will underpin our digital capability and enablement. The increase includes investment in data management, analytics, business process, and customer relationship management projects.

2. Digital Capability Pilot

This pilot is an initiative to build and test our capability to:

- deploy and acquire data from up to 10,000 digital devices (meters and network sensors)
- transfer the data via networks
- interface the data with IT platforms and redesign processes
- implement organisational change.

This pilot will in turn inform and establish the business case for broader implementation. We are and will continue to, work collaboratively with the other metropolitan water

corporations and the broader industry to share the learnings.

3. Customer metering

In 2014, we ceased our proactive Meter Replacement Program to deliver immediate cost savings in anticipation of a transition to digital meters. To continue delivering cost savings to customers we will limit the Meter Replacement Program to the minimum needed for ensuring meter compliance until the end of the Digital Capability Pilot. After this time we will again expand the Meter Replacement Program to replace meters before their reliability and accuracy deteriorate.

Major capital projects

The following table provides a summary of our major capital projects for the next regulatory period. Supporting summary documentation and business cases have been developed for each. These detail the options considered, and identify project risks and how they are managed. Supporting documentation can be made available to the ESC upon request. No specific government or customer contributions are applicable on projects unless specified. All projects, except where noted, will be delivered through South East Water's relevant capital delivery model, as described previously, with its associated competitive tendering arrangements.

Table 36 Major capital projects

Major project	Expenditure profile – \$ million (1 January 2018 dollars)					2018-23 regulatory period – \$ million
	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M	
Boneo Water Recycling Plant upgrade	\$30.0	\$50.0	\$21.5	\$0	\$0	\$101.5
<p>A major upgrade of the Boneo Water Recycling Plant, addressing current and projected capacity constraints arising from growth in the number of properties connected to the sewerage network. We forecast \$2 million will be delivered in 2017-18; the remainder during the period 2018-23.</p> <p>The project commenced in quarter 1 (Q1) 2016-17 and upgrades are forecast to finish for treatment in Q2 2020-21 and energy recovery in Q4 2020-21.</p> <p>The upgrade will be treated as a large project and will be delivered through a customised delivery model.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Elster Creek sewer catchment capacity improvement works	\$0	\$0.7	\$19.9	\$10.6	\$2.0	\$33.2
<p>A network upgrade to ensure that the Elster Creek sewer catchment continues to cater for forecast population growth expected within the area it services, meeting EPA requirements to avoid wet weather spills to the environment.</p> <p>The project is forecast to commence in Q3 2018-19 and finish in Q2 2022-23.</p> <p>The project costs are not included in prices, see discussion under 'Capital management and allocation of risk'.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Clayton East and West sewer catchment capacity improvement works	\$0	\$0	\$0.5	\$2.5	\$14.5	\$17.5
<p>A network upgrade to ensure that the Clayton East and West sewer catchment continues to cater for forecast population growth expected within the area it services, meeting EPA requirements to avoid wet weather spills to the environment.</p> <p>The project is forecast to commence in Q2 2020-21 and finish in Q4 2022-23.</p> <p>The project costs are not included in prices, see discussion under 'Capital management and allocation of risk'.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Pakenham East sewer servicing	\$4.5	\$10.7	\$0	\$0	\$0	\$15.2
<p>Catering for residential growth in Pakenham East requires a sewerage connection to the Pakenham Water Recycling Plant by delivering a sewerage transfer network between Pakenham East and the Pakenham Water Recycling Plant.</p> <p>The project is forecast to commence in Q2 2017-18 and finish in Q4 2019-20.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						

Table 36 Major capital projects *continued*

Major project	Expenditure profile – \$ million (1 January 2018 dollars)					2018-23 regulatory period – \$ million
	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M	
Ballarto Road East sewer pump station	\$13.8	\$0	\$0	\$0	\$0	\$13.8
<p>Supporting residential growth in Clyde by delivering a sewerage transfer network between Clyde and the existing network. We forecast \$10 million will be delivered in 2017-18; the remainder between 2018-23.</p> <p>The project commenced in Q3 2016-17 and is forecast to finish in Q4 2019-20.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Hanna Street sewerage capacity improvements	\$0	\$5.3	\$1.0	\$4.8	\$0	\$11.0
<p>A network upgrade to ensure that the Hanna Street sewer catchment continues to cater for forecast population growth, meeting EPA requirements to avoid wet weather spills to the environment and prevent dry weather surcharging.</p> <p>The project is forecast to commence in Q2 2018-19 and finish in Q4 2021-22.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Water recycling plant drying pan and stockpile area upgrades	\$2.6	\$1.4	\$2.1	\$2.9	\$1.1	\$10.2
<p>Encompasses the relining strategy for sludge drying pans and sludge stockpile areas at our water recycling plants over the next five years. We forecast \$1.6 million will be delivered in 2017-18; the remainder between 2018-23.</p> <p>The project commenced in Q3 2016-17 and is forecast to finish in Q4 2022-23.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Digital Capability Pilot	\$7.4	\$2.7	\$0	\$0	\$0	\$10.1
<p>Further develop and expand on our end-to-end digital capability to enhance customer interactions; optimise water and sewerage network operation; and support integrated water management initiatives for new developments.</p> <p>This pilot is forecast to finish in Q1 2019-20.</p> <p><i>Supports all five outcomes</i></p>						

Key capital programs

The table on the following page summarises our key programs for the next regulatory period. Key programs are those not associated with major capital projects and have expenditure that is ongoing during the next regulatory period. In line with our asset management planning process, supporting summary documentation has been developed for each program, including historical expenditure, full project lists, options analysis, cost estimation, risk assessment and project prioritisation as appropriate for the program. Supporting documentation can be made available to the ESC upon request. All costs are in 2017-18 dollars, unless otherwise indicated.

Table 37 Key programs

Key programs	Expenditure profile – \$ million (1 January 2018 dollars)					2018-23 regulatory period – \$ million
	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M	
Sewerage network growth	\$28.1	\$20.7	\$25.1	\$25.1	\$25.0	\$123.9
<p>Providing sewerage services to new developments and ensuring network compliance as previously described.</p> <p>Current regulatory period expenditure forecast: \$148.8 million</p> <p>Next regulatory period expenditure forecast, including major capital projects: \$163.9 million</p> <p>Expenditure has been increased to continue to provide sewerage services to new developments and ensure network compliance. The increase is due in part to growth in existing areas causing the sewerage network to reach capacity in a number of instances. During the current regulatory period no such works were required.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Water network renewals	\$18.9	\$19.1	\$20.9	\$23.5	\$23.5	\$105.9
<p>Delivers an acceptable level of service for repeat unplanned water interruptions and associated community impacts adversely impacting customers.</p> <p>Current regulatory period expenditure forecast: \$70.4 million</p> <p>Expenditure has been increased to maintain levels of service to customers and proactively replace high-risk assets, delivering against customer expectations as described under 'Outcome 1: Get the basics right, always'. To ensure that the right level of renewals are undertaken, significant work has been conducted with Monash University aligning renewal length with level of service. Unit rates have increased during the current period due to regulatory requirements relating to asbestos cement pipes. Unit rates are forecast to increase further during the next regulatory period due to resourcing constraints. South East Water plans to bear the risk of this materialising.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p> <p><i>KPI - Number of customers receiving greater than 5 unplanned water supply interruptions/% of total customers</i></p>						
Business support systems	\$22.8	\$19.5	\$19.7	\$20.4	\$18.7	\$101.1
<p>Expenditure is primarily for systems related to the management of assets, customer interactions, information analysis, corporate systems and processes, and also for IT infrastructure.</p> <p>Current regulatory period expenditure forecast: \$57.2 million</p> <p>Expenditure has been increased to support expansion of our digital capabilities.</p> <p><i>Supports all five outcomes</i></p>						
Sewerage backlog	\$18.3	\$15.4	\$13.2	\$13.3	\$21.6	\$81.8
<p>Replacing ageing and failing septic tanks, resulting in significant improvements to public health and the environment.</p> <p>Current regulatory period expenditure forecast: \$143.3 million</p> <p>Expenditure has been reduced with the completion of the Peninsula ECO reticulation network and the program focus shifting to customer connections.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p> <p><i>Supports Outcome 5: Support my community, protect our environment</i></p>						
Water recycling plant capacity improvements	\$10.6	\$22.2	\$12.4	\$14.6	\$7.1	\$66.8
<p>Increasing capacity at our eight water recycling plants in line with growth in sewage volume and treatment requirements.</p> <p>Current regulatory period expenditure forecast: \$115.1 million</p> <p>Next regulatory period expenditure forecast, including major capital projects: \$168.3 million</p> <p>Expenditure has been increased primarily due to delivery of the Boneo Water Recycling Plant upgrade.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						

Table 37 Key programs *continued*

Key programs	Expenditure profile – \$ million (1 January 2018 dollars)					2018-23 regulatory period – \$ million
Drinking water network growth	\$18.5	\$12.8	\$9.9	\$9.8	\$7.3	\$58.3
<p>Providing drinking water services to new developments and ensuring compliance of existing systems.</p> <p>Current regulatory period expenditure forecast: \$43.0 million</p> <p>Expenditure has been increased to provide supply sources to continue to cater for growth in Clyde and Officer, two of the fastest growing areas in our region.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Water recycling plant reliability	\$7.0	\$8.2	\$8.3	\$7.7	\$7.9	\$39.0
<p>Keeping our eight water recycling plants operating in accordance with their design and able to accept all sewage flows from customers' properties on a 24/7 basis.</p> <p>Current regulatory period expenditure forecast: \$30.2 million</p> <p>Next regulatory period expenditure forecast, including major capital projects: \$49.2 million</p> <p>Expenditure has been increased primarily due to drying pan and stockpile area upgrades (not undertaken during the current period) and increasing mechanical and electrical replacements.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Recycled water network growth	\$5.8	\$10.3	\$5.3	\$6.3	\$10.9	\$38.5
<p>Provide recycled water services to designated areas.</p> <p>Current regulatory period expenditure forecast: \$34.7 million</p> <p>Expenditure is broadly in line with historical expenditure.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p> <p><i>Supports Outcome 5: Support my community, protect our environment</i></p> <p><i>KPI - % of customers in designated greenfield areas receiving alternative water</i></p>						
Customer metering	\$6.2	\$6.2	\$6.2	\$7.7	\$7.8	\$34.0
<p>Provide meters to all new properties that connect to our drinking water and recycled water networks and replace existing meters efficiently.</p> <p>Current regulatory period expenditure forecast: \$23 million</p> <p>Expenditure has been increased to ensure compliance of meters with the national standard. The replacement program had been discontinued during the current period during exploration of how digital capabilities may improve metering.</p> <p><i>Supports Outcome 3: Fair and affordable for all</i></p>						
Sewerage network renewals	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$25.0
<p>Manage the risk of structural failures in our gravity sewerage network and associated customer and environmental impacts, maintaining an acceptable level.</p> <p>Current regulatory period expenditure forecast: \$31.8 million</p> <p>Expenditure is broadly in line with historical expenditure. While reliability modelling indicates that an increase in expenditure is required, we propose to bear the risk that additional renewals may be necessary to maintain levels of service.</p> <p><i>Supports Outcome 1: Get the basics right, always</i></p>						
Carbon emissions reduction	\$3.9	\$0.1	\$3.0	\$7.1	\$7.0	\$21.0
<p>Reducing our carbon emissions by investing in solar panels and battery storage at a number of our water recycling plants.</p> <p>Current regulatory period expenditure forecast: \$2.4 million</p> <p>Expenditure has been increased to deliver against the target of achieving zero carbon emissions by 2030 in line with customer expectations as described in 'Outcome 5: Support my community, protect our environment'</p> <p><i>Supports Outcome 5: Support my community, protect our environment</i></p> <p><i>KPI - % reduction in South East Water's carbon emissions</i></p>						

Capital management and allocation of risk

Appropriate capital management is a key component in delivering customer value. To ensure that customer outcomes are delivered efficiently and effectively, we have robust internal asset management processes. These include:

- Developing asset management plans for all primary services and support assets. Through the planning process we conduct challenges of the levels of service we provide, conduct optioneering including non-asset solutions, capital and operational trade-offs, and seek to prioritise and defer expenditure as far as practical
- Aligning our asset management systems to ISO 55001 to ensure efficient management of the full lifecycle of our assets. We will support the delivery of customer outcomes and management of the Capital Expenditure Program across the next regulatory period by seeking certification of our asset management systems against ISO 55001
- Creating governance structures that provide project control points and guide overall program management. These include the Asset Management Committee, Capital Coordination Group as well as the board and executive as appropriate, all of whom have been engaged in developing of the capital forecast.

Our capital delivery models have allowed us to develop a 'risk-bank', which enables risk contingencies to be managed across the capital program. They also provide appropriate risk sharing between South East Water and our delivery partners, aiming for risk to be borne by the party best positioned to manage it.

We are currently developing a project forecasting tool called Project Foresight to enable a full project view, from concept to commissioning, of all capital projects. Project Foresight will enable greater visibility of the capital plan, ensuring that the right assets are delivered at the right time, and that the capital delivery models continue to align with the ongoing investment requirement.

To ensure that we are at the forefront of capital efficiency during the next regulatory period we will seek to influence the Water Services Association of Australia to conduct a national, or international, capital benchmarking survey. These measures will ensure that we continue to deliver value for money services.

We're also prepared to accept and manage risk on behalf of our customers to help lower prices and support our 'Advanced' PREMO rating for risk (See 'PREMO self-assessment' section).

During the next regulatory period, we will assume \$110 million of capital expenditure risk on behalf of our customers and ensure that our Capital Expenditure Program is weighted firmly in their favour.

To do this, we have:

- developed our baseline capital program in line with ESC expectations, ensuring that we've only included projects that are certain and that estimates for those projects align with expected delivery costs
- protected our customers. Escalation advice provided by WT Partnership indicates that construction costs will increase in the region of five to seven per cent per annum (inclusive of CPI) during the next regulatory period. We've made a decision to take this cost risk away from our customers and take on the full risk of escalation beyond CPI. This will result in South East Water eliminating \$60 million of capital expenditure risk from our customers.¹⁴

Additionally we've shaped our capital forecasts by critically reviewing regulatory requirements for asset design and construction.

To take further risk away from customers we've made a decision to exclude sewer catchment capacity improvement works at Clayton East and West and Elster Creek from the total costs that are recovered during the next regulatory period. By working with the EPA there is an opportunity to explore approaches that will deliver similar, or better, customer and environmental outcomes without the need for the same level of capital investment.

These projects will be treated as uncertain projects, with efficient actual construction cost (if any) to be rolled into the regulatory asset base at the end of the period. This will result in a total capital cost reduction of \$50 million across the period.

14. Escalation advice to South East Water, WT Partnership, June 2017.

Total capital expenditure forecasts

The following figure and table provide a breakdown of the Capital Expenditure Program by both project type and by service/driver. The forecast capital expenditure is higher than the actual expenditure in the current regulatory period primarily due to Boneo Water Recycling Plant upgrade, costs associated with a transition to a digital utility expanding our digital capabilities and increased expenditure on water mains renewals.

The majority of expenditure in the next regulatory period is driven by key programs and a focus on servicing growth in our region. A number of these programs have higher than historical costs, with details provided under the 'Key capital programs' section.

A higher level of expenditure is expected in 2024-26 for further water recycling plant upgrades.

The long-term forecasts will continue to be optimised through our asset management planning processes.

All expenditure not classified as a major capital project or key program is 'other capital expenditure'. This constitutes 15-20 per cent of our overall Capital Expenditure Program and is primarily made up of:

- corporate overheads
- proactive and reactive maintenance works for pump stations
- maintenance of customer connections
- minor network maintenance.

Fig 17 Capital Expenditure Program by project type – \$ million (1 January 2018 dollars)

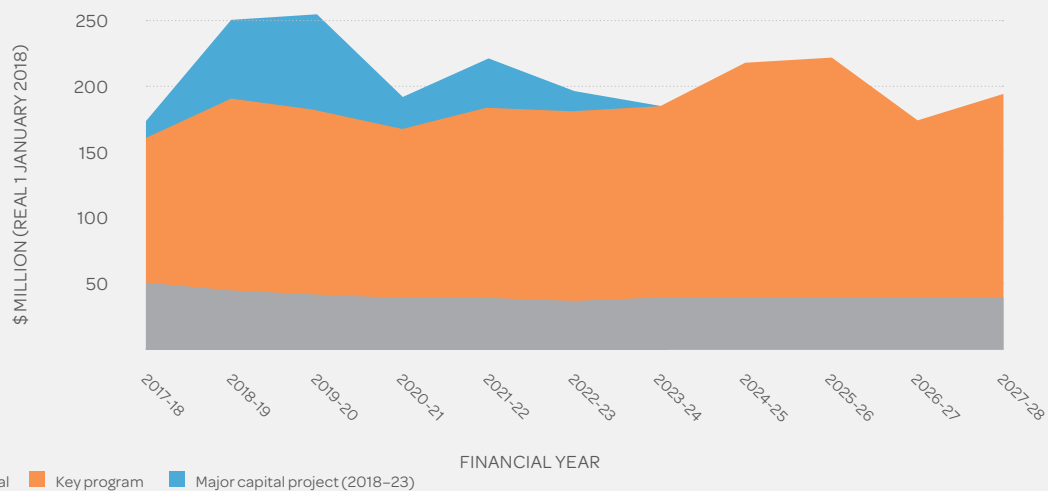


Table 38 Total Capital Expenditure Program by service – \$ million (1 January 2018 dollars)

Service		2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M
Sewerage	Growth	102.9	123.1	70.9	53.0	56.2
	Renewals	40.3	38.3	39.4	37.3	35.6
	Improvements/compliance	26.0	19.5	19.4	21.9	31.0
Water	Growth	28.7	22.2	19.6	21.0	18.4
	Renewals	34.4	34.0	35.7	39.6	38.0
	Improvements/compliance	9.5	3.2	1.2	2.4	2.5
Recycled water	Growth	7.6	12.4	7.0	8.3	13.1
	Renewals	0.3	0.4	0.3	1.4	0.5
	Improvements/compliance	0.1	0.0	0.2	34.6	0.6
Total		249.9	253.0	193.7	219.5	195.9

Revenue requirement



South East Water's revenue requirement reflects the costs we need to recover through prices. It includes:

- return on our assets, which is the expected value of our regulatory asset base (RAB) estimated for each year of the regulatory period, multiplied by the weighted average cost of capital
- expected regulatory depreciation of new and existing assets
- expected total operating expenditure, including:
 - water and sewage bulk charges from Melbourne Water

- South East Water's controllable operating expenditure
 - environmental contribution and other licence fees
- expected tax.

The following sections outline the assumptions we used to calculate our revenue requirement for the next regulatory period.

Opening asset base

The opening RAB for 2013–14 has been calculated by:

- + adding actual capital expenditure from each year of the current period to the opening RAB in 2013–14

- subtracting actual customer contributions, any government contributions, asset disposals and regulatory depreciation.

We have used South East Water's up-to-date forecast capital expenditure for 2017–18 to determine the 2018–19 opening asset base. This is because we project a lower forecast from the determination's allowance. We will provide updates to the ESC on the 2017–18 capital expenditure forecast during the review process to ensure the expenditure included in the opening RAB is as close to actual as possible.

Table 39 Regulatory asset base, 2013-18 – \$ million – 1 January 2018 dollars

Regulatory asset base	2013–14 \$M	2014–15 \$M	2015–16 \$M	2016–17 \$M	2017–18 \$M
Opening RAB	2,894.1	3,052.8	3,195.9	3,231.3	3,286.7
plus Gross capital expenditure	229.4	232.7	149.6	174.6	184.6
less Government contributions	-	-	-	-	-
less Customer contributions – cash	21.7	31.5	47.8	46.3	38.4
Net Capital Expenditure	207.7	201.2	101.8	128.3	146.2
less Disposals	1.9	1.8	1.8	1.8	1.8
less Regulatory depreciation	47.2	56.2	64.6	71.1	75.3
Closing RAB	3,052.8	3,195.9	3,231.3	3,286.7	3,355.7
Average RAB	2,973.4	3,124.3	3,213.6	3,259.0	3,321.2

To calculate the closing RAB for each year of the next regulatory period, we:

- + added forecast capital expenditure to the opening RAB
- subtracted customer contributions, any government contributions, regulatory depreciation and asset disposals.

South East Water continues to calculate regulatory depreciation as per the approach used in the current regulatory period:

- Existing assets are depreciated on the basis of an average asset life.
- New assets are depreciated using a straight line approach, based

on the estimated asset lives and asset utilisation for the individual asset types.

The following table outlines our proposed opening and closing RAB out to 2027-28. We use the average of the opening and closing RAB of each year to determine the return on assets included in the revenue requirement.

Table 40 Regulatory asset base, 2018-28 – \$ million (1 January 2018 dollars)

Regulatory asset base	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M	2023-24 \$M	2024-25 \$M	2025-26 \$M	2026-27 \$M	2027-28 \$M
Opening RAB	3,355.7	3,481.7	3,605.4	3,674.3	3,774.7	3,844.3	3,891.6	3,971.2	4,054.0	4,090.2
plus Gross capital expenditure	249.9	253.0	193.7	219.5	195.9	180.1	218.7	227.0	179.2	196.2
less Government contributions	-	-	-	-	-	-	-	-	-	-
less Customer contributions – cash	38.3	38.1	38.0	33.5	33.4	33.4	33.3	33.2	29.1	29.0
Net capital expenditure	211.7	214.9	155.7	186.0	162.4	146.7	185.4	193.8	150.2	167.1
less Disposals	26.6	23.9	11.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
less Regulatory depreciation	59.2	67.2	75.7	83.7	91.0	97.7	104.0	109.2	112.2	114.5
Closing RAB	3,481.7	3,605.4	3,674.3	3,774.7	3,844.3	3,891.6	3,971.2	4,054.0	4,090.2	4,141.0
Average RAB	3,418.7	3,543.5	3,639.8	3,724.5	3,809.5	3,868.0	3,931.4	4,012.6	4,072.1	4,115.6

Proposed annual revenue requirement

Our annual revenue requirement for the next regulatory period is based on:

→ assumptions used to calculate the return on assets, assuming an 'Advanced' PREMO rating

→ regulatory depreciation based on new and existing assets

→ estimated tax which has been based on a 30 per cent tax rate consistent with the ESC template, (corporate annual tax payment forecasts can be provided on request)

→ operating expenditure forecasts.

During the next 10 year period we forecast a relatively stable revenue requirement, as we are not expecting significant changes in costs to deliver on the proposed customer outcomes during this period.

Table 41 Proposed annual revenue requirement, 2018-28 – \$ million (1 January 2018 dollars)

	2018-19 \$M	2019-20 \$M	2020-21 \$M	2021-22 \$M	2022-23 \$M	2023-24 \$M	2024-25 \$M	2025-26 \$M	2026-27 \$M	2027-28 \$M
Return on assets	143.6	148.8	152.9	156.4	160.0	162.5	165.1	168.5	171.0	172.9
Regulatory depreciation	59.2	67.2	75.7	83.7	91.0	97.7	104.0	109.2	112.2	114.5
Bulk charges	491.8	489.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
Controllable operating expenditure	123.5	123.8	124.9	125.2	125.2	125.0	124.8	124.5	124.1	123.7
Environmental contribution and other licence fees	41.2	41.2	41.1	41.4	41.9	40.8	40.8	40.6	40.9	41.3
Tax	15.0	15.9	16.9	16.5	17.2	18.8	19.7	20.6	20.5	21.1
Revenue requirement	874.3	886.8	890.1	902.0	914.1	923.5	933.2	942.3	947.5	952.2

Financial position

Our financial position during the next regulatory period is projected to remain stable, as we are well within the thresholds for each of the four financial indicators calculated in the financial template.

While totax per water connection increases slightly in the first two years of the period driven mostly by the capital expenditure for our

key projects, our internal financing ratio remains above 40 per cent during the period and interest covers greater than 3.4 per cent, both fluctuating with the trend of our capital expenditure profile.

Our gearing ratio is expected to remain below 45 per cent for the period with funds from operation to net debt increasing slightly throughout the period from 9.5 to 11.3 per cent, reflecting our

commitment to efficiency in our operating expenditure.

Our strong financial position is supported by a recent credit opinion provided by Fitch Ratings which maintained our credit rating as A-.¹⁵ This credit opinion can be provided upon request.

15. Fitch Ratings, Credit Opinion of South East Water Corporation, 28 June 2017.

Tariff structures, prices and customer impacts



Tariff structures

In setting our proposed tariff structures for the next regulatory period, we engaged a mix of residential and business customers through a series of six co-creation workshops to better understand how alternative tariff options could better meet customer expectations. This process identified six key customer priorities.



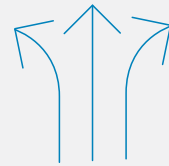
Fairness

When examining current and proposed options, it was important to all research participants that tariff structures be fair.



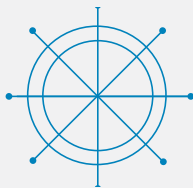
Certainty

Customers want to know that their bill is reasonably predictable. A higher variable bill was met with some concern unless it could deliver a significant bill reduction. Customers agreed that higher variable bills should be delivered as an option only.



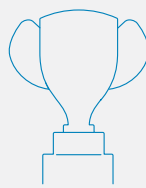
Choice

Choice is liked by customers as long as the choices are easy to understand.



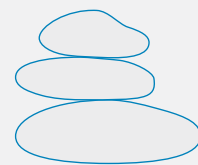
Control

To feel a real sense of control, customers felt that they would need to know more about what their charges are for.



Reward and recognition

Water efficiency is very important to most people. Therefore it was important to them to see water saving valued and encouraged in the tariff design.



Simplicity

Customers liked simplicity; however the higher level response from customers was that they would not prefer simplicity if it reduced transparency of the bill (as per 'control').

<p>We then explored current and alternative tariff structure options with customers, including:</p> <p>→ how the current tariff structure could better deliver on the six customer priorities</p>	<p>→ how proposed tariff structures options could best meet the six customer priorities.</p> <p>(Noting that no single tariff design will meet all priorities.)</p>	<p>The following tables provide further detail on what our customers told us and our proposed approach for tariff structures for the next regulatory period.</p>
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Table 42 Proposed tariff structure changes

Water and sewerage service charges

<p>Current approach</p>	<p>We collect water service charges from residential and business customers on the basis of the title of their property. This means that customers with individual titles or strata titles pay a service charge for each dwelling. We proposed in the current period that we would commence collecting charges on the basis of occupancy, although this was not implemented.</p> <p>Water service charges are currently the same for all residential customers; business customers pay a slightly higher rate for sewerage service charges.</p>
<p>What our customers told us</p>	<p>Certainty: customers want certainty, so when we explained the basis for the fixed charges they supported retaining some form of fixed charges.</p> <p>Fairness: residential customers thought large business customers should pay higher service charges.</p>
<p>Proposed approach for next regulatory period</p>	<p>Retain our current approach to charging residential and business water and sewerage charges on the basis of title only.</p> <p>Investigate options during the period as to how service charges can better reflect the size of the customer.</p> <p>Investigate better ways to communicate to customers about the basis of the service charges.</p>

Water usage charges

<p>Current approach</p>	<p>Drinking water consumption for residential customers is charged using an inclining block tariff with three steps designed to encourage sustainable water use; customers pay a progressively higher unit price in the second and third steps.</p> <p>Business customers are charged at the second step.</p>
<p>What our customers told us</p>	<p>Fairness: the majority of customers think that large households should not be penalised with the three step inclining block.</p> <p>Reward for saving water: customers thought it was important they be rewarded for saving water.</p> <p>Control: customers want to avoid high unexpected bills therefore were not supportive of higher variable bills, for all customers, though some customers supported having the choice to opt-in to a higher variable bill.</p>
<p>Proposed approach for next regulatory period</p>	<p>Residential customers</p> <p>To balance fairness and affordability, including managing customer impacts while still providing some reward for saving water, we propose to reduce our tariff structure from three steps to two and look at other ways to provide rewards for saving water. This will mean all water consumption greater than 40 kL in the quarter will be charged at the second step price.</p> <p>While this change moves water usage prices to be more cost reflective, due to customer preferences, they still remain higher than the long run marginal cost of water.</p> <p>Business customers</p> <p>Retain a single price for business customers that is equal to the second step.</p>

Table 42 Proposed tariff structure changes *continued*

Sewage disposal charge (SDC)	
Current approach	<p>Residential customers currently pay a SDC based on 75 per cent of water volumes (detached dwellings) or 85 per cent of water volumes (multi-unit dwellings).</p> <p>Business customers are charged an SDC based on their industry type and projected disposal.</p>
What our customers told us	<p>Fairness: customers often disputed that apartments and detached houses should pay different amounts given some apartments can have outside areas.</p> <p>Simplicity: our current approach creates significant confusion for residential customers as it's not clear what the charge is for and how it's calculated.</p> <p>Control: customers want to avoid unexpectedly high bills, which are compounded by the SDC when they have leaks on their property or high summer usage, however they did support some variable component in sewer prices.</p>
Proposed approach for next regulatory period	<p>Residential customers To balance customer priorities we propose to:</p> <p>Reduce the sewage disposal charge for residential customers to 50 per cent of the current rate to make the charges simpler and reduce the the impact on bills associated with increased water usage in summer periods or when customers have a leak.</p> <p>Improve communication to customers on the sewerage services they receive.</p> <p>Business customers Retain our current approach although we will investigate this further during the next regulatory period.</p>
Residential recycled water prices	
Current approach	<p>Residential customers pay a small service charge of \$24 a year and a usage charge that is 87 per cent of the step 1 drinking water charge. For some small usage customers there is limited incentive to use recycled water over drinking water.</p>
What our customers told us	<p>Reward for saving water: customers believe that those being supplied with recycled water should be given more incentive and be rewarded more for using recycled water where appropriate and reducing demand on drinking water supplies.</p> <p>Support for alternative water: customers strongly supported South East Water continuing to supply alternative water to reduce demand for drinking water.</p>
Proposed approach for next regulatory period	<p>To balance customer priorities, support the delivery of customer 'Outcome 5: Support my community, protect our environment' and provide greater incentive for those with a recycled water connection to reduce demand on drinking water, we propose to reduce the price of recycled water to 80 per cent of step 1 of the residential drinking water price and remove the annual service charge for recycled water.</p>

2018-23 water and sewerage prices

The following table outlines proposed prices for residential customers for the next regulatory period. While all water and sewerage prices would reduce, in adjusting prices for the next regulatory period and with the conclusion of the \$100 Government Water Rebate,

we have sought to balance customer impacts and included the following changes:

- Reducing water usage charges from three to two steps to balance affordability for large households while also still providing some reward for saving water
- Retaining business customer water usage charged at the second step

- Reducing the amount of the SDC charge for residential customers to 50 per cent of the current rate
- Reducing recycled water usage charges to 80 per cent of step 1 of the drinking water price and removing the annual service charge, to provide those customers with a greater incentive to use alternative water supply.

Table 43 Proposed residential water and sewerage tariffs 2017-18 to 2022-23 (1 January 2018 dollars)

Residential tariffs	2017-18 \$	2018-19 \$	2019-20 \$	2020-21 \$	2021-22 \$	2022-23 \$
Water service charge	121.08	114.27	114.27	114.27	114.27	114.27
Sewerage service charge	384.48	362.87	362.87	362.87	362.87	362.87
Variable water charge (water – kL)						
Step 1 (0 – 440 litres/day)	2.67	2.40	2.40	2.40	2.40	2.40
Step 2 (441 – 880 litres/day to 2017-18); (from 2018-19 >440)	3.24	3.05	3.05	3.05	3.05	3.05
Step 3 (>880 litres/day), removed from 2018-19	3.86	-	-	-	-	-
Sewage disposal charge	1.88	0.94	0.94	0.94	0.94	0.94
Recycled water usage charge	2.32	1.92	1.92	1.92	1.92	1.92

Table 44 Proposed business water and sewerage tariffs 2017-18 to 2022-23 (1 January 2018 dollars)

Business tariffs	2017-18 \$	2018-19 \$	2019-20 \$	2020-21 \$	2021-22 \$	2022-23 \$
Water service charge	121.08	114.27	114.27	114.27	114.27	114.27
Sewerage service charge	456.60	430.93	430.93	430.93	430.93	430.93
Fire service charge	121.08	114.27	114.27	114.27	114.27	114.27
Water usage charge (kL)	3.24	3.05	3.05	3.05	3.05	3.05
Sewage disposal charge	1.88	1.77	1.77	1.77	1.77	1.77

Customer bill impacts

The following tables provide a sample of residential and business customer impacts proposed for the next regulatory period, with

the average residential customer receiving a 7.3 per cent real bill reduction.

While the figures in the table demonstrate that overall, the

majority of customers will receive a bill reduction, there are some residential customers who will receive a small bill increase due to the end of the \$100 Government Water Rebate.

Table 45 Annual residential customer bill impacts (1 January 2018 dollars)

	Usage (kL)	2017-18 bill \$ (\$17-18)	2018-19 bill \$ (\$17-18)	\$ change	% change (real)
Owner occupier – small user (apartment w/1-2 occupants)	90	\$772	\$756	-\$16	-2.1%
Owner occupier – average user (detached dwelling w/3 occupants)	150	\$1,017	\$943	-\$74	-7.3%
Owner occupier – large user (5 occupants; small garden)	350	\$1,959	\$1,688	-\$271	-13.8%
Tenant – small user (apartment w/1-2 occupants)	90	\$267	\$279	\$13	4.7%
Tenant – average user (detached dwelling w/2 occupants)	112	\$356	\$348	-\$9	-2.5%
Tenant – large user (5 occupants; small garden)	350	\$1,454	\$1,211	-\$243	-16.7%

Table 46 Annual business customer bill impacts – water and sewerage only (1 January 2018 dollars)

Customer categories	Usage (kL)	2017-18 bill \$ (\$17-18)	2018-19 bill \$ (\$17-18)	\$ change	% change (real)
Office building, laundries	262	\$1,867	\$1,762	-\$105	-5.6%
Swimming centres	3,138	\$15,158	\$14,306	-\$852	-5.6%
Caravan parks, child care centres	1,159	\$5,417	\$5,112	-\$304	-5.6%
Cemeteries, construction sites	1,025	\$4,377	\$4,131	-\$246	-5.6%
Golf courses, football ovals	2,159	\$7,970	\$7,522	-\$448	-5.6%
Farms, nurseries	220	\$1,296	\$1,224	-\$73	-5.6%

Business trade waste prices

Trade Waste Agreement Charges

For the current regulatory period we based the trade waste annual fixed charge (Trade Waste Agreement Charge) on a risk ranking of one to five for each trade waste customer, with charges reflecting the level of impact that each customer has on our business. We consider that this approach and associated charges still

reasonably reflects the costs required to service these customers. We therefore propose to retain our current pricing and criteria around Trade Waste Agreement Charges for the next regulatory period.

Volume and quality charges

We currently charge volume and separate load charges for suspended solids, Biochemical Oxygen Demand (BOD) and Total Kjeldahl Nitrogen (TKN).

During the next regulatory period we plan to review this approach to ensure it is cost reflective and sends the appropriate price signals about the impact of customer trade waste loads on our infrastructure and product targets. This review will also incorporate any findings from Melbourne Water's review of its charges prior to the resetting of its prices in 2021-22. In the meantime, we propose to retain trade waste volume and load prices at their current levels for the next regulatory period.

Table 47 Proposed business trade waste tariffs 2017-18 to 2022-23 (1 January 2018 dollars)

Business trade waste tariffs	2017-18 \$	2018-19 \$	2019-20 \$	2020-21 \$	2021-22 \$	2022-23 \$
Annual Trade Waste Agreement Charges						
Risk-rank category 5	414.76	414.76	414.76	414.76	414.76	414.76
Risk-rank category 4	2,378.08	2,378.08	2,378.08	2,378.08	2,378.08	2,378.08
Risk-rank category 3	4,756.20	4,756.20	4,756.20	4,756.20	4,756.20	4,756.20
Risk-rank category 2	7,134.36	7,134.36	7,134.36	7,134.36	7,134.36	7,134.36
Risk-rank category 1	14,268.72	14,268.72	14,268.72	14,268.72	14,268.72	14,268.72
Volume of trade waste (kL)	0.93	0.93	0.93	0.93	0.93	0.93
BOD (kg)	0.92	0.92	0.92	0.92	0.92	0.92
SS (kg)	0.52	0.52	0.52	0.52	0.52	0.52
TKN (kg)	2.02	2.02	2.02	2.02	2.02	2.02

New customer contributions and backlog charges

New customer contributions

In the current regulatory period we introduced separate new customer contribution (NCC) charges for

water, sewerage and recycled water for customers in the Casey and Cardinia growth areas, and separate charges for all other areas. The current set of charges were developed in accordance with the ESC's principles for NCCs.

For the next regulatory period we propose to retain our current

approach as it remains consistent with the ESC's new customer contributions principles. As part of our proposed ongoing engagement with the development industry, during the next regulatory period we will continue to review the appropriateness of these charges.

Table 48 Proposed new customer contributions 2017-18 to 2022-23 (1 January 2018 dollars)

NCC	2017-18 \$	2018-19 \$	2019-20 \$	2020-21 \$	2021-22 \$	2022-23 \$
Cardinia area (per lot)						
Water	1,526	1,526	1,526	1,526	1,526	1,526
Sewer	1,092	1,092	1,092	1,092	1,092	1,092
Recycled water	1,697	1,697	1,697	1,697	1,697	1,697
Casey area (per lot)						
Water	1,083	1,083	1,083	1,083	1,083	1,083
Sewer	691	691	691	691	691	691
Recycled water	1,561	1,561	1,561	1,561	1,561	1,561
Other areas (per lot)						
Water	691	691	691	691	691	691
Sewer	691	691	691	691	691	691
Recycled water	691	691	691	691	691	691

Backlog charges

In the current period, we accelerated construction of Peninsula ECO, our sewer backlog program on the southern Mornington Peninsula, enabling customers to connect earlier than originally planned (please see current period outcomes in the 'Capital expenditure forecasts' section). This approach provided a better outcome for all customers as cost efficiencies were gained from delivering the required infrastructure in a shortened timeframe, while also enabling the potential to achieve environmental benefits sooner.

In areas of the Mornington Peninsula, connecting to backlog sewerage has been optional and customers who wish to do so are currently charged a customised fee based on the number of years away their connection would be under the standard backlog program. This currently ranges from approximately \$1,500 to \$9,500. This approach is based on our existing model for brought forward backlog charges and is consistent with South East Water's proposed approach for other areas.

We have seen significant take up of early connections to Peninsula ECO

as customers understand the individual, as well as the broader, environmental benefits to connecting.

Given this we propose to continue our current charging approach to enable earlier than planned connections, consistent with section 4.4 of our 2013 Price Determination. However to balance the benefits to the individual customer and the broader environmental outcome for all South East Water customers, we propose to increase the base level backlog charge from \$1,500 to \$2,500.

Miscellaneous charges

We have reviewed our major miscellaneous charges to ensure these proposed prices are consistent with ESC principles. The following table outlines the proposed major miscellaneous charges for the next regulatory period.

Table 49 Proposed miscellaneous charges 2017-18 to 2022-23 (1 January 2018 dollars)

	2017-18 \$	2018-19 \$	2019-20 \$	2020-21 \$	2021-22 \$	2022-23 \$
20 mm meter plus delivery and installation	101.73	101.73	101.73	101.73	101.73	101.73
20 mm meter with integrated 'remote read' device	233.36	233.36	233.36	233.36	233.36	233.36
20 mm service connection to mains up to 300 mm	359.46	359.46	359.46	359.46	359.46	359.46
Removal and testing of water meters	127.19	127.19	127.19	127.19	127.19	127.19
Application fee for connection of single residential property to water and/or sewer	55.30	55.30	55.30	55.30	55.30	55.30
Plan showing sewer location within a property	27.64	27.64	27.64	27.64	27.64	27.64
Backlog connection charge	1,500	2,500	2,500	2,500	2,500	2,500
Recycled water inspection fees	334.59	334.59	334.59	334.59	334.59	334.59
Information statements – all forms of lodgements (includes Melbourne Water's share)	31.02	31.02	31.02	31.02	31.02	31.02
Restoration of supply at the meter	94.00	94.00	94.00	94.00	94.00	94.00
Application fee to build over South East Water asset or easement	66.36	66.36	66.36	66.36	66.36	66.36
Application fee – non works	202.40	202.40	202.40	202.40	202.40	202.40

Form of price control and adjusting prices

Form of price control

South East Water proposes to retain its current tariff basket for water and sewage charges for the next regulatory period, where we will seek to use our price control to better balance risk between the business and customers.

We also propose to continue engaging with customers on appropriate tariff structures, which may mean we look to revisit our approach to price control, including the demand for choice tariffs and alternative tariff options that are enabled by expanding our digital capabilities.

As per the current period, if we seek to increase individual prices above the upper three per cent constraint, it is proposed that current determination requirements apply, including ESC approval and further justification of the proposal, supported by a new tariff strategy.

Adjusting prices

Consistent with the current period we propose to retain our annual price adjustments contained in South East Water's 2013 Price Determination, which allows for annual price adjustments for:

- annual desalination water orders and changes to the security charge

- pass through of other annual changes to Melbourne Water's bulk water and sewerage prices, including its cost of debt adjustments
- unforeseen events for which we are not able to manage the financial impacts.

Additionally, in our annual price adjustments we propose to include an adjustment for the rolling 10 year average cost of debt changes to be implemented from 2018-19. We propose to incorporate uncertain projects identified in this submission (should they proceed during the next regulatory period) into prices in the following regulatory period.

Managing risk



At South East Water, we identify major risk exposures using an enterprise-wide risk management process based on the AS/NZS ISO 31000:2009 Risk Management standard and the Victorian Government Risk Management Framework.

Fundamentally, as a business we are prepared to accept and manage risk on behalf of our customers to drive efficiencies on price. There are many risk factors that impact price. However, when considering this submission holistically, the following key program forecasts have been identified as significant risk areas of focus to achieve better price outcomes for our customers.

Significant risk areas

Each of these risk areas, along with other lower level program risks, are maintained in our Price Submission Risk Register, which is available to the ESC upon request. This register captures details on risk categorisation, measurement, allocation and mitigation.

1. Demand forecasting

A principal determinant of price, variations in forecasting methodology and assumptions pose a significant risk on the final price to the customer as well as the projected revenue for our business. Applying a demand profile that best represents our service region and our own views on growth was a fundamental driver in using forecasts from Spatial Economics.

2. Operating expenditure

When focusing on price efficiencies, how we invest our customers' money must:

- ensure the reliable operation of assets
- improve customer service and experience
- maintain an economical corporate presence.

Coming from a high-performing base, it was imperative for our business to continue to manage our operating expenditure risk in a fiscally responsible manner. We're proposing to maintain our historical stretch performance by setting an ambitious cost efficiency improvement rate that is aligned to growth and still allows us to deliver on improved service levels.

3. Capital expenditure

In order to meet our service commitments, grow our service region or meet important compliance requirements, how we plan and prioritise our Capital Expenditure Program could present both price and service risks to our customers.

With this in mind, our underlying approach to capital expenditure is to:

- pursue efficiencies that we can influence (i.e. capital cost escalation factors)
- defer discretionary or uncertain projects when risk appropriate
- progress with works only when there is a clear trigger.

Risk allocation and strategic consideration of risk

In order to manage these risk areas, we believe that we have the appropriate structures, processes and relationships in place that will support a greater allocation of risk towards South East Water.

With this focus in mind, we developed a new, scenario-based risk allocation tool to better inform strategic decisions across each of our key programs.

As illustrated in the risk allocation tool on the following page, we considered a series of program level scenarios that contextualised strategic, risk-based decisions against a scale that shows the balance of risk between our business and our customers. Applying this tool to forecasts of demand, operating expenditure and capital expenditure allowed us to explicitly compare how our decisions could be framed from the perspective of both our customers and the ESC.

Our approach to risk allocation and scenarios clearly demonstrates that our proposed option (Scenario 3) seeks to accept more risk on behalf of our customers, which equates to an 'Advanced' PREMO rating for 'Risk'.

The strategic consideration, and extent of this risk allocation towards South East Water, has been determined jointly by both our executive and board.

Table 50 Risk allocation tool

Scenario analysis	Risk allocation (scale)	Risk impact	PREMO
<p>Scenario 1</p> <p>Demand: Conservative forecast, growth markedly slower than VIF</p> <p>Operating expenditure: Productivity improvement rate below 1%</p> <p>Capital expenditure: Full price pass through with all uncertain projects included (no deferrals)</p>	Pass on full cost or price impact to customers	Risk balance firmly in favour of South East Water	Basic
<p>Scenario 2</p> <p>Demand: Forecast aligned to VIF</p> <p>Operating expenditure: Productivity improvement rate at 1% (aligned with ESC benchmark)</p> <p>Capital expenditure: Efficient price increase pass through with only reasonable costs of uncertain projects included</p>	Pass on realistic costs/prices of a well-run company to customers	Risk shared between South East Water and the customer	Standard
<p>Scenario 3</p> <p>Demand: Forecast above VIF resulting in a 2.7% reduction in prices</p> <p>Operating expenditure: Proposing a productivity improvement that offsets the cost impacts of growth (materially greater than the ESC's hurdle rate and absorbing a number of cost increases over and above CPI), resulting in a 0.7% reduction in prices</p> <p>Capital expenditure: Absorbing price increases over and above CPI as well as excluding approximately \$50 million in uncertain but necessary projects, resulting in a 0.6% reduction in prices</p>	Take cost or price risk away from customers	Risk balance in favour of customer	Advanced
			
<p>Scenario 4</p> <p>Demand: Aggressive forecast significantly higher than VIF</p> <p>Operating expenditure: Productivity improvement rate of 3+%</p> <p>Capital expenditure: Price efficiency beyond CPI with only some development costs of uncertain projects included. The most conservative regulatory driven projects are deferred</p>	Drive further cost or price efficiency. Take further cost or price risk away from customers	Risk balance firmly in favour of customer	Leading

Using the assumptions in Scenario 3, the extent of the additional risk we are prepared to manage on behalf of our customers across each of our key programs is material. On top of the 10.5 per cent average price reduction that we would equate to a 'Standard' PREMO rating for 'Risk', we're seeking to manage more risk for our customers, resulting in an additional four per cent reduction in average prices. We consider that this uptake in risk allocation positions us strongly for an 'Advanced' PREMO rating for 'Risk'.

Attestation and governance arrangements

South East Water has a comprehensive framework of governance practices in place designed to provide appropriate levels of review and oversight. While these practices derive principally from statutory requirements and good governance guidelines, they stretch beyond fulfilling a regulatory imperative and are embedded right throughout the corporation.

In fulfilling the attestation requirements of the ESC, South East Water leveraged our existing, robust governance arrangements comprising of board, board sub-committee and executive management processes while also developing a standalone attestation framework for this 2018 Price Submission.

The development of a bespoke attestation framework sought to actively engage and involve executive management and directors on the key activities and strategic decision points of the submission. In this context, our attestation framework was characterised by:

- Formation of a price submission team that was led by an executive sponsor and project manager to ensure the operational aspects of the submission were being addressed and that the level of business commitment remained high
- Establishment of a Price Submission Steering Committee, comprising executive members to provide high level guidance and support of our holistic strategy; as well as a Price Submission Working Group comprising business unit subject matter experts, to manage and drive to completion the more operational aspects of the submission
- Provision of regular price submission updates in board and board sub-committee meetings including the reporting of a PREMO assessment and compliance status dashboard as well as the methodical development of our engagement program, demand and expenditure forecasts
- Involvement of board members and executive management through dedicated price submission workshops for key decision input, guidance and ratification
- Development of an attestation roadmap that outlined key activities, milestones and important documentation that would be required to support the board and executive attestation obligations
- Review and feedback of iterative versions of this submission document prior to release to the ESC.

Full details of our attestation framework are available to the ESC upon request.

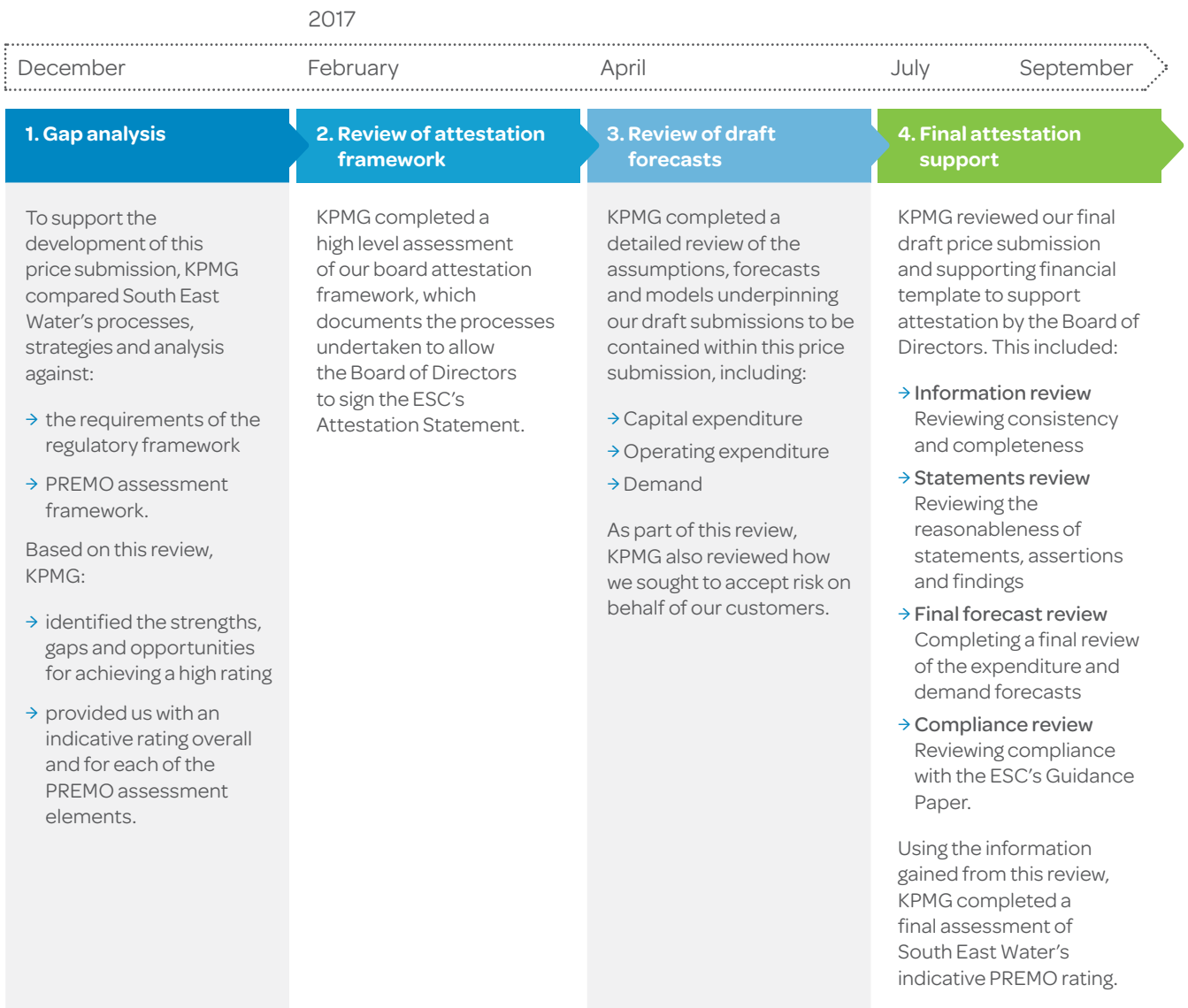
External assurance review

We engaged KPMG to provide an independent review of the material aspects of this submission to ensure that we are providing our best submission possible.

We selected KPMG for its strong experience in regulatory frameworks and its exceptional reputation within the Victorian water industry. As KPMG were the principal advisors to the ESC regarding the reforms to Victoria's water regulatory arrangements, including the PREMO framework, its input into achieving a successful outcome under this new approach was viewed as invaluable.

As part of KPMG's role to independently review the development of this price submission, we asked KPMG to undertake a series of tasks from December 2016 through to September 2017. A broad overview of KPMG's review process is provided on the following page.

Fig18 KPMG review process



Having KPMG involved along our entire price submission journey has provided us with in-depth, analytical insights and sufficient time to implement key recommendations to enhance the material elements of this submission. Together with our attestation framework, this critical piece of external assurance was essential to providing a high level of comfort to the board in providing its ultimate attestation statement. It has also significantly contributed to ensuring that this price submission is both fully compliant and of a high quality.

Full details of KPMG’s engagement with South East Water is available to the ESC upon request.

PREMO self-assessment



Overall PREMO rating

South East Water has applied the PREMO Assessment Tool to determine its overall PREMO rating as well as ratings for each PREMO category. Our rationale for each rating and responses to each of the ESC's guiding questions is provided in the following section.

Overall rating	Rationale
ADVANCED	<p>This self-assessment rating is based on:</p> <p>Outcomes: Alignment of our proposed outcomes, outputs and programs to meet customer expectations and with targets that are either ahead or are being maintained at an above-industry average performance level.</p> <p>Management: Material cost efficiency built into operating and capital expenditure forecasts.</p> <p>Engagement: Comprehensive engagement program with a strong alignment of customer preferences to the submission's outcomes.</p> <p>Risk: Approach to setting demand, OPEX and CAPEX that significantly allocates risk to South East Water to lower prices for customers.</p>

Outcomes

Outcomes rating	Rationale
ADVANCED	<ul style="list-style-type: none"> → We propose to significantly improve customer value by focusing on a set of key output targets that will increase or be maintained ahead of the industry average to deliver on our customer outcomes. → Our customer outcomes are articulated entirely from the customer perspective. → Outcomes are customer driven and can be directly connected with their priorities and level of importance to customers. → Our expenditure program inclusions and exclusions have been significantly influenced by our customers – refer to sections Capital and Operating Expenditure programs. → Customer performance reporting that is comprehensive, targeted and regular that also provides penalties for non-performance.

ESC guiding questions	Our response
<p>1 Has the business provided evidence that the outcomes proposed have taken into account the views, concerns and priorities of customers?</p>	<p>Yes. Details of our comprehensive and extensive Customer Engagement Program, where we have taken into account the views, concerns and priorities of customers, can be found within the 'Outcomes' sections and 'Engaging with our customers'.</p> <p>The outcomes contained in this submission relate directly to customer responses both at a broad theme and granular program level.</p>
<p>2 Has the business provided sufficient explanation of how the outcomes it has proposed align to the forecast expenditure requested?</p>	<p>Yes. The explanation of how the proposed outcomes align to forecast expenditure for both operating and capital expenditure can be found within their respective sections.</p> <p>The composition of each expenditure program clearly shows how our customers have heavily influenced our spend profile through program inclusions or exclusions.</p>
<p>3 Has the business proposed outputs to support each of its outcomes, which are measurable, robust and deliverable?</p>	<p>Yes. The proposed outputs to support outcomes are measurable, robust and deliverable. Details of proposed outputs are detailed within the 'Outcomes' sections.</p> <p>In general, our outputs can be sensibly connected to each of the customer outcomes. Each output can be reliably measured using appropriate data collection processes; is suitably robust as validated by our Customer Engagement Program and internal management; and is capable of being delivered during the next regulatory period based on our forecast expenditure and strong performance history.</p>
<p>4 Has the business provided evidence that the outputs it has proposed are reasonable measures of performance against stated outcomes?</p>	<p>Yes. The proposed outputs are reasonable measures of performance against stated outcomes. Details supporting the rationale of the proposed measures is contained within the 'Outcomes' sections. A definition of each measure is also included in Appendix 5.</p>
<p>5 Has the business demonstrated a process to measure performance against each outcome and to inform customers?</p>	<p>Yes. Performance against each outcome will be measured internally as part of our monthly business performance review reporting process and externally to our customers quarterly.</p> <p>A template of our customer-facing performance report can be found in Appendix 4. Customers will be encouraged to view our performance results through a bill insert reminder message and notification on our website.</p>

Management

Overall rating	Rationale
ADVANCED	<ul style="list-style-type: none"> → High-performing and efficient operating cost base as demonstrated by Department of Environment, Land, Water and Planning and Water Services Association of Australia benchmarking. → Operating expenditure rate of efficiency improvement proposed at 2.3 per cent, materially ahead of the industry average and the ESC's efficiency hurdle rate (used in 2013 Price Determination). → Demonstrated that the proposed capital expenditure forecast is efficient. We also challenged the level of service we provide, prioritised works and deferred projects out of the period. Additionally, we will absorb capital escalation costs (above CPI) and defer uncertain projects to keep prices down. → Forecast regulatory depreciation aligns with asset utilisation. → Demand profile based on forecasts by Spatial Economics, which aligns with higher-than-VIF customer growth expected in our service region. → Complete ownership and accountability of submission by executive management and board, as demonstrated by a comprehensive and bespoke attestation framework. → High level of assurance over the inputs, drivers and final submission provided by assurance and advisory firm, KPMG.

ESC guiding questions	Our response
1 To what extent has the business demonstrated how its proposed prices reflect only prudent and efficient expenditure?	<p>We have demonstrated that proposed prices reflect only prudent and efficient expenditure to a very high level.</p> <p>This is best demonstrated by a proposed price reduction to customers with largely improved service levels.</p> <p>Our Operating Expenditure Program will strive for a 2.3 per cent efficiency improvement rate, well ahead of a standard one per cent. Similarly, our Capital Expenditure Program is absorbing capital escalation costs (above CPI) as well as electing to not include uncertain projects in cost recovery.</p> <p>Details of our forecast Operating and Capital Expenditure programs can be found within their respective sections.</p>
2 To what extent has the business justified its commitment to cost efficiency or productivity improvements?	<p>We have justified our commitment to cost efficiency and productivity improvements to a very high level.</p> <p>The extensive and comprehensive customer engagement results are the primary justification for our commitment (refer to our 'Outcomes' sections). Our customers value greater efficiency and because of this we're able to provide markedly lower prices. Our customers have also asked for productivity improvements and we've committed to a range of output targets that are ahead of the industry average.</p>

<p>3 To what extent have senior management, including the board, demonstrated ownership and commitment to the proposals in its submission?</p>	<p>The executive team and board have demonstrated ownership and commitment to the proposals in this submission to a very high level. This has been supported by monthly board updates, participation of all board and executive members in dedicated workshops and project team meetings, as well as utilisation of board sub-committees for capital expenditure review and governance assurance.</p> <p>This is principally demonstrated by board and executive attestation of this submission in line with our attestation framework. Details of our attestation is attached to this submission.</p> <p>Additionally, the executive team and board have supported this submission by providing resources (both internal, external and financial) and offering guidance and decision-making (through steering committee and existing governance structures).</p>
<p>4 To what extent has the business justified or provided assurance about the quality of the submission, including the quality of supporting information on forecast costs or projects?</p>	<p>We have justified, through independent assurance, the quality of this submission, including the quality of supporting information on forecast costs or projects to a very high level.</p> <p>Assurance over the inputs, drivers and final submission has been provided by assurance and advisory firm, KPMG. Since October 2016, KPMG has performed a regular gap analysis; reviewed our internal attestation framework; evaluated expenditure and demand forecasts; and performed a final assessment of our completed submission and supporting financial template. The scope and final report from KPMG is available to the ESC upon request.</p>
<p>5 To what extent has the business provided evidence that there is senior level, including board level, ownership and commitment to its submission and its outcomes?</p>	<p>Evidence that executive management and the board have demonstrated ownership and commitment to this submission and its outcomes has been provided to a very high level.</p> <p>This is principally demonstrated by their attestation of the submission in line with our attestation framework. Details of our attestation is attached to this submission.</p> <p>Other supporting evidence, such as relevant papers (and minutes) discussed at executive management and board meetings, are available to the ESC upon request.</p>

Engagement

Engagement rating	Rationale
ADVANCED	<ul style="list-style-type: none"> → Targeted and extensive engagement with customer segments through multiple channels. By harnessing numerous and varying communication channels we were able to ensure we reached a broad representation of the region we serve. → Early engagement with frequent check-ins to ensure customers could participate in the engagement journey. → Simple-to-understand and transparent information and instructions provided to all participants in the Customer Engagement Program (including Easy English and translated information). → A building block approach to understanding our customers. Each stage of our engagement program sought to continually progress our understanding of customer priorities and values and how we can best deliver on them. → As outlined under our five customer 'Outcomes' sections, customer input has been used to define outcomes, targets and programs, which has heavily influenced our expenditure forecasts. → Our Customer Engagement Council guided, informed and challenged the Customer Engagement Program (please refer to the Customer Engagement Council's support of our approach to customer engagement in Appendix 2). → Ongoing engagement with customers through our customer experience surveys has further supported our understanding of customer expectations and priorities.

ESC guiding questions	Our response
<p>1 To what extent has the business justified how the form of engagement suits the content of consultation, the circumstances facing the water business and its customers?</p>	<p>We have justified the form of engagement and its suitability with regards to content, the circumstances facing us as a business and our customers to a very high level.</p> <p>Through an ongoing, comprehensive Customer Engagement Program, we have used numerous methods of communication including face-to-face interviews, focus groups, online communities, website surveys and an interactive bill simulator.</p> <p>Each of these methods has applied a bespoke approach to engagement in order to obtain meaningful input from customers. For example, our website surveys were simple, easy to understand and concise to maximise completion rates. In contrast, face-to-face interviews and focus groups involved more in-depth discussions to gain more detailed insights. Please refer to 'Engaging with our customers' section for further detail.</p>
<p>2 To what extent has the business demonstrated that it provided appropriate instruction and information to customers about the purpose, form and content of the customer engagement?</p>	<p>We have demonstrated that we have provided appropriate instruction and information to customers about the purpose, form and content of our customer engagement to a very high level.</p> <p>Through each of our engagement channels we have sought to provide customers with the appropriate level of detail on its purpose, form and content. Where possible and when suitable, we have provided customers with pre-reading material to assist with their understanding of us, as a business, as well as the topics that impact our product or service offering. Please refer to 'Engaging with our customers' section for further detail. A supporting report from our engagement partners GfK, is also available to the ESC upon request.</p>
<p>3 To what extent has the business demonstrated that the matters it has engaged on are those that have the most influence on the services provided to customers and prices charged?</p>	<p>We have demonstrated that the matters we have engaged on are those that have the most influence on the services provided to customers and prices to a very high level.</p> <p>Our Customer Engagement Program is underpinned by an objective to better understand our customers' priorities and what they value. Each stage in our engagement program sought to continually progress our understanding of customer priorities and values and how we can deliver on them.</p>

4	To what extent has the business explained how it decided when to carry out its engagement?	<p>We have explained the timing of our customer engagement to a high standard.</p> <p>The timing of our comprehensive Customer Engagement Program has been centred on allowing our business to firstly better understand our customers' priorities and what they value. Having established this, the scheduling of our engagement has allowed us sufficient time to develop an appropriate response to our customers and refine the key inputs and programs of this submission.</p>
5	To what extent has the business demonstrated how its engagement with customers has influenced its submission?	<p>We have demonstrated how our engagement with customers has influenced our submission to a very high standard.</p> <p>The outcomes contained in this submission relate directly to customer responses both at a broad theme and granular program level. An alignment of outcomes to customer input can be found through each of our five customer outcomes. Details of our comprehensive and extensive Customer Engagement Program can be found within the 'Engaging with our customers' section and in Appendix 3.</p>

Risk

Risk rating	Rationale
ADVANCED	<ul style="list-style-type: none"> → Developed a new approach to risk allocation that uses program-level scenarios to contextualise risk-based decisions. → Using this approach for operating and capital expenditure and demand forecasting, we are prepared to accept and manage risk on behalf of our customers to drive a material price reduction for customers. → Certification maintained for ISO 9001: Quality Management, ISO 14001: Environment Management, AS/NZS 4801: Occupational Health and Safety; ISO 22000: Food Safety but adjusted for sewage distribution; and Hazard Analysis and Critical Control Point for drinking water, recycled water and biosolids. → Materially changed guaranteed service levels (GSL) scheme that provides greater service accountability to customers. We also propose to not recover additional costs associated with the revised GSL scheme from our customers so as to provide a greater incentive to deliver service outcomes.

ESC guiding questions	Our response
1	<p>Has the business demonstrated robust process for identifying risk, and how it has decided who should bear these risks?</p> <p>Yes. The robust process for identifying risk and how we have decided who should bear these risks is described holistically in the 'Managing risk' section.</p> <p>In general, we are prepared to accept and manage risk on behalf of our customers to drive efficiencies on price. The extent of this risk allocation towards South East Water has been determined jointly by both the executive and board.</p> <p>Additionally, as risk and the risk allocation consideration extends across the key program inputs of this submission (principally demand, operating expenditure and capital expenditure), a discussion on managing risk has also been embedded in those relevant areas of the submission.</p>
2	<p>To what extent does the proposed guaranteed service level (GSL) scheme provide incentives for the business to be accountable for the quality of services delivered, and provide incentives to deliver valued services efficiently?</p> <p>The proposed GSL scheme provides incentives for us to be accountable for the quality of services delivered, and provide incentives to deliver valued services efficiently to a very high level.</p> <p>Details of our materially improved GSL scheme can be found within the 'Guaranteed service levels' section. We have changed our GSL scheme to provide greater service accountability to our customers. For example, we're proposing additional disruption and customer responsiveness GSLs as well as a community care GSL for beach closure.</p>

Appendices



Appendix 1 – Attestation

Chair and Managing Director's Attestation

The directors of South East Water and members of the Executive Management team, having made such reasonable inquiries of management as we considered necessary, attest that, to the best of our knowledge, for the purpose of proposing prices for the Essential Services Commission's 2018 Water Price Review:

- information and documentation provided in the price submission and relied upon to support South East Water's price submission is reasonably based, complete and accurate in all material respects
- financial and demand forecasts are the business's best estimates, and supporting information is available to justify the assumptions and methodologies used
- the price submission satisfies the requirements of the 2018 Water Price Review Guidance paper issued by the Essential Services Commission in all material respects
- the proposed overall PREMO rating of 'Advanced' was determined through a transparent and robust self-assessment using the ESC's PREMO Assessment tool and Scoring Methodology.

Dated at Melbourne on this 28th day of September 2017.

.....
Lucia Cade
Chair

.....
Terri Benson
Managing Director

Appendix 2 – Customer Engagement Council – letter of support

Customer Engagement Council - Letter of Support

South East Water recruited members of our council in late 2016. Our Terms of Reference empowered us to challenge:

- The robustness of South East Water's customer engagement methodologies;
- The accuracy of interpretation of research findings into business insights and proposals;
- The transparency of business decisions around customer insights; and
- The robustness of the implementation of the engagement and communication plans.

South East Water staff responded positively to all our challenges. The amount of customer research was impressive and we were given ample access to the research consultants and their on-line forums. At a meeting with the Board, it was clear South East Water was genuine in its search to better understand customer value and preferences.

Given time constraints in the lead up to the Price Submission being finalised, the latter part of the process was a little rushed. The council would have preferred more time to challenge the reasoning behind business decisions in areas where conflicting customer feedback had been received on tariffs, but overall we are pleased to support the suite of proposals in the Price Submission.

There is feed-back which South East Water has committed to implement. At our meeting in November we will critically evaluate their proposals for how they will progress these issues and how they will transparently report progress and performance. Of interest to the Customer Engagement Council will be efforts to improve interactions with business customers and in particular, developers and plumbers.

On behalf of council members – Liam Smith, Max Shifman, Gerard Brody, Jon Onley and Sundram Sivamalai – I am pleased to offer this letter of support.



David Heeps
Chair, Customer Engagement Council

Appendix 3 – Summary of customer engagement phases

Phase 1 – Understanding customer value

Aug – Oct 2016

Understanding customer value

- Information audit and working groups
- 6 stakeholder interviews
- Online survey
- Online community

1,552 customers

Objectives

- To establish an understanding of customer perceptions of South East Water and what they value
- Provide a set of expectations to assist in the development of customer outcomes
- Provide a high level understanding of perceptions of key initiatives to deliver on these outcomes

Overview

To better understand, explore and quantify customer value needs and requirements, this phase encompassed an information audit of our Customer Experience Program; existing research and insights on the value of water through international resources; and interviews with water and energy leaders and employees.

We empowered customers to define what value from South East Water meant to them through a deliberative online community and explored and quantified this further through an online survey. This helped us better understand the hierarchy of needs and benefits that customers are seeking in terms of value. We used both a max-differential* and an appeal-based methodology. The max-differential results were almost identical to the appeal data.

*For one group n = 755, we used a max-differential method which asks consumers to make trade-offs between needs that, if delivered to, will increase satisfaction with South East Water. The other group n = 756 were asked to assess requirements based on a five point appeal based scale. This allowed us to then effectively prioritise all needs amongst the total customer group.

Demographics

Interviews (Aug 2016): 6 industry leaders from water and energy

Online community (20 Aug – 2 Sept 2016): Equal mix of gender, CALD backgrounds, 27 residential owner/tenants, 8 small to medium enterprises (SMEs)

Online survey (Oct 2016): 1,511 (sample size gave a 95 per cent confidence level of likelihood to represent the broader needs of our customer base). Broad sample of customers including all key sub-populations according to living classifications and demographics including culturally and linguistically diverse (CALD) customers.

Customer information/and or instruction

There was little information or instruction provided during this initial phase of engagement as the objective was to empower our customers to define and prioritise value. Customers in our online community were provided a variety of activities/tasks to complete in their own time. Once again no prior material was provided, but activities were explained and timeframes for completion were flexible.

Relevant GfK reports

- Value of Water
- Online Community- wave 1

All reports, stimulus material and information provided to customers is available to the ESC upon request.

Phase 2 - Developing outcomes and initiatives

Nov 2016 – Jul 2017

Developing outcomes and initiatives

- 25 focus groups
- 20 interviews
- Online community

243 customers

Objectives

- To test outcomes and initiatives suggested further
- Better understand changes and trends across different customer segments
- To explore our current guaranteed service levels and opportunities to evolve them

Overview

To deliver on these objectives customers in similar demographic segments were brought together for collaborative discussions via focus groups. For councils and large business customers, we conducted in-depth one-on-one interviews.

Demographics

Focus groups (8 Dec 2016 – 11 May 2017): 133 residential customers comprising different types and demographics including 32 CALD to ensure a representative sample of our customer base and 52 business customers including small to medium enterprises, plumbers, developers, builders and real estate agents.

Interviews (Feb – July 2017): 20 in-depth, mix of local councils and large commercial customers.

Online community (25 Nov - 5 Dec 2017): 38 members comprising a mix of residential customer types including CALD, owners and tenants, gender and age mix, small to medium enterprises (low and high water intensive businesses).

Customer information/and or instruction

To enable effective engagement in the interviews and focus groups, topics and questions for exploration were determined based on findings from the previous engagement phase. Some stimulus material was used as appropriate to drive discussions or enable deep diving, however through both the interviews and focus groups we were mindful of not leading conversations but encouraged customers to challenge, question, create and prioritise value and the initiatives that would deliver on this.

To ensure online community members were able to make informed decisions (without the influence of others) they were provided with pre-work to complete, i.e. exploring their water bill and other utility bills and making an enquiry with our contact centre before engaging in a response on the online community.

Relevant GfK reports

- Residential Focus Groups
- Business Customers
- Councils
- Developer Report
- Real Estate Focus Groups
- Online Community – wave 2

All reports, stimulus material and information provided to customers is available to the ESC upon request.

Phase 3 – Prioritisation and willingness to pay

Apr – Jun 2017

Testing
prioritisation
and willingness
to pay

- 6 customer testing sessions
- Online bill simulator

3,797 customers

Objectives

- To test customer willingness to pay for key initiatives previously supported
- To help us understand customer priorities to focus our investments accordingly
- To establish a statistically confident quantification of the above objectives

Outcome

To do this we developed a bill simulator with GfK and its technology partner Delib. The bill simulator was a simple and engaging way for customers to have their say on what they pay and was selected for its ease of use, convenience (it could be completed online through a variety of devices), ability to collect meaningful and insightful responses and encouraged deliberate and considered responses. It is also a validated and trusted platform used by a number of government agencies and utilities worldwide for budgeting purposes.

To ensure the simulator was easy and intuitive to use, and that the content we developed was clear and easy to understand, we conducted user experience testing with customers and refined the simulator based on their feedback. The success is evidenced in the feedback from customers and the overwhelming participation level. With 3,791 customers participating, this sample size provided a margin of error of +/- 1.6% with a 95% confidence level.

Demographics

Customer testing (Apr 2017): 6 customers, various ages and genders, culturally and linguistically diverse (CALD), various employment statuses, suburbs and water usage levels

Online bill simulator (29 May - 24 June): 3,791 customers, ages 18-65, tenants, owners, CALD, various genders, employment statuses, suburbs and water usage levels (609 recruited to ensure sample accuracy).

Customer information/and or instruction

Introductory text and instruction for using the bill simulator was provided to customers. The outcome areas explored were summarised and options explained. To ensure customers could easily and effectively engage through this method, user experience testing was conducted prior to the release. Customers were also given the opportunity to provide verbatim feedback through this method.

With extensive promotion and nearly a month to complete the simulator, customers had a reasonable and fair opportunity to participate.

Relevant GfK reports:

- Online Billing Simulator Pilot
- Online Billing Simulator

All reports, stimulus material and information provided to customers is available to the ESC upon request.

Phase 4 – Co-creating value and measuring performance

Jun – Aug 2017

Co-creating value and measuring performance

- 2 focus groups
- 5 co-creation sessions

48 customers

Objectives

- To understand customers' level of knowledge around their bill
- To test changes to our current tariff structures
- To test changes to current guaranteed service levels (GSLs)
- To explore customers' views and ideas around re-designing the bill

Overview

To deliver on these objectives customers in a variety of demographic segments were brought together for collaborative discussions via co-creation sessions. The focus groups were conducted with water intensive small to medium enterprises (SMEs) to enable a more streamlined view for business.

Demographics

Focus groups (6 Jun 2017): water intensive SMEs

Co-creation sessions (14 Jun – 2 Aug 2017): mix of residential customers, gender, family types, suburbs, tenants and owners.

Customer information/and or instruction

Focus groups were given stimulus material or findings from previous engagement phases as appropriate to drive discussions or enable deep diving. Co-creation workshop participants exploring more complex or specific issues such as tariffs, charges and GSLs were provided with stimulus material and even pre-reading or activities to prepare them for topics being discussed.

Relevant GfK reports

- Co Creating GSLs
- Co-Creating tariff design

All reports, stimulus material and information provided to customers is available to the ESC upon request.

Phase 5 – Validating outcomes and Initiatives (outputs)

Aug - Sept 2017

Validating outcomes and initiatives

- Online community

55 customers

Objectives

- To re-test customer outcomes, prioritisation and language
- To re-test guaranteed service levels (GSLs) and tariff charges
- To help establish a set of service principles for key outcomes

Overview

To deliver on these objectives, 55 customers from a variety of demographic segments were bought together in an online community to test outcomes and engagement strategies both individually and in discussions with each other.

Demographics

Online community (4 Aug- 15 Sep 2017): 55 customers, ages 18-65, tenants, owners, culturally and linguistically diverse, small to medium enterprises, various genders, employment statuses, suburbs and water usage levels.

Customer information and/or instruction






To provide enough information to effectively validate key engagement findings and our proposed responses (i.e. GSLs, outcomes and initiatives) customers were provided summaries of previous findings and activities (i.e. explore the website, other utility bills etc) prior to engaging in the online community.

Relevant GfK reports

- Understanding Customer Preferences
- Online Community- wave 3

All reports, stimulus material and information provided to customers is available to the ESC upon request.

Appendix 4 – 2018-19 Performance scorecard (SAMPLE)

Outcomes	Output measures	Status	Snapshot of key programs
 <p>1. Get the basics right, always</p>	Percentage compliance with drinking water and recycled water standards	✓	→ 21 km of water mains replaced
	Number of water quality complaints per 100 customers	⊗	→ Boneo Water Recycling Plant on track for completion
	Number of customer receiving greater than 5 unplanned water supply interruptions	✓	
	Number of customers receiving 3 or more sewerage blockages	✓	
 <p>2. Warn me, inform me</p>	Percentage of customers notified per unplanned interruptions (for customers who have given us email/mobile details)	✓	→ Implemented survey to test level of disruption for customers
	Average duration of unplanned water supply interruptions	✓	
	Percentage of customers impacted by unplanned water supply interruption in peak times	⊗	
	Percentage of planned water interruptions restored within notification period	⊗	
 <p>3. Fair and affordable for all</p>	Operating cost per property	✓	→ Commenced digital meter trial across 20,000 properties
	Number of customers supported by South East Water Assist program	✓	
	Average level of debt upon entry to South East Water Assist program	⊗	→ Increased number of customers supported through SEW Assist
 <p>4. Make my experience better</p>	Percentage of customers rating of 6 or above out of 10 for satisfaction	✓	→ Reduced total complaints by 1%
	Percentage of customers rating of 6 or above out of 10 for	✓	→ Commenced program to improve customer data management
	Total complaints per 100 customers	✓	
 <p>5. Support my community, protect our environment</p>	Total net CO2 emissions	✓	→ Placed solar panels at all of our treatment plants to offset our energy usage
	Number of significant spills (dry weather)	✓	
	Percentage of customers in greenfield areas receiving recycled water	✓	
	Volume of alternative water as a percentage of total water used in designated greenfield areas	✓	

✓ ON TRACK
 ✓ WITHIN RANGE TARGET
 ⊗ TARGET NOT MET

Appendix 5 – Output measure definitions

Customer outcomes



1. Get the basics right, always

Output measures	Definition
Percentage compliance with drinking water and recycled water standards	Consistent with DWQ
Number of water quality complaints per 100 customers	Consistent with CRS-4
Number of customer receiving greater than 5 unplanned water supply interruptions	Consistent with REW9
Number of customers receiving 3 or more sewerage blockages	Consistent with RES 5



2. Warn me, inform me

Percentage of customers notified per unplanned interruptions (for customers who have given us email/mobile details)	Unplanned interruptions – as per REW 5. Number of customers notified of unplanned interruptions (who have given us email/mobile contact details) over the year divided by total number of customers affected by unplanned water supply interruptions (for customers who have given us email/mobile contact details) over the year
Average duration of unplanned water supply interruptions	Consistent with REW-8
Percentage of customers impacted by unplanned water supply interruption in peak times	Number of residential customers affected by unplanned water supply interruptions in peak hours (5 am - 9 am and 5 pm - 10 pm) divided by the total number of residential customers affected by planned and unplanned water supply interruptions.
Percentage of planned water interruptions restored within notification period	Planned interruption – as per REW 5 Number of planned interruptions where the actual start to actual finish duration is less than or equal to the planned start to planned finish duration divided by total number of planned interruptions



3. Fair and affordable for all

Operating cost per property	Total controllable operating costs divided by total number of water customers
Number of customers supported by South East Water Assist program	Total number of customer supported by the program in the 12 month period
Average level of debt upon entry to South East Water Assist program	Level of debt of each customer divided by the number of customers that enter the South East Water Assist program



4. Make my experience better

Customer satisfaction – rating of 6 or above out of 10	Survey is asking customers post interactions are asked to score out of 10 'Overall how satisfied were you with your experience'. A positive result is a score of 6 or more.
Total complaints per 100 customers	Consistent with CRS 3



5. Support my community, protect our environment

Total net CO ₂ emissions	Consistent with CRR 5
Number of significant spills (dry weather)	Consistent with EPA notification protocol for reporting high priority sewer spills.
Percentage of customers in greenfield areas receiving recycled water	Number of residential customers in designated greenfield recycled water areas receiving recycled water divided by total residential customers with a recycled water meter receiving either recycled or potable supply
Volume of alternative water as a percentage of total water used in designated greenfield areas	Recycled water volume used for residential customers in designated greenfield recycled water areas receiving recycled water divided by total potable and recycled volume used at residential customers with a recycled water meter receiving either recycled or drinking water supply. Volumes amalgamated for a 12 month period, as of 1 July.