



# SA Water Regulatory Determination 2020: Guidance paper 3

### **Service standards**

November 2018

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#### Related reading

This Guidance Paper should be read in conjunction with the Framework and Approach paper and other Guidance Papers released by the Commission for SA Water Regulatory Determination 2020. Those papers and other information about SA Water Regulatory Determination 2020, are available on the Commission's website:

https://www.escosa.sa.gov.au/industry/water/retail-pricing/sa-water-regulatory-determination-2020

#### Timing for this review and upcoming consultation opportunities

While the Commission remains responsible for making the final regulatory determination, which will require SA Water to provide the water and sewerage retail services valued by customers for the lowest sustainable cost, the review process will involve multiple opportunities for stakeholders to be involved prior to that final determination.

Input from a diverse range of stakeholders is important, as it helps the Commission to make better informed and more inclusive decisions. The Commission will therefore draw on the full range of evidence provided by all stakeholders in making the final determination.

The timing of the key stages in SA Water Regulatory Determination 2020 are illustrated below, with the Commission's key consultation stages shown in green.

#### SAW RD20 review timeline Feb 20 to Jul 19 to Oct 19 to Feb 19 to Oct 18 Feb 19 May 20 Oct 19 Mar 20 Sep 19 Nov 19 Jun 19 Stage 5: Stage 8: Stage 1: Stage 3: Stage 4: Stage 7: Stage 6: Stage 2: Commission Commission **SA Water** Commission Commission receives Commission Negotiation releases finalises consults on **SA Water** consults on proposed releases Guidance proposed draft Forum tests finalises its SA Water's plan and final draft plan SAWRD20 **Papers** plan draft plan proposed SAWRD20 reports plan

SA Water Regulatory Determination 2020 (SAW RD20) will set maximum revenues and minimum service standards for SA Water's drinking water and sewerage services, as well as setting pricing requirements for other miscellaneous retail services, to apply from 1 July 2020 to 30 June 2024.

#### SAW RD20 will challenge SA Water to:

- provide water and sewerage services at the lowest sustainable price for the quality and reliability levels valued by customers, and
- have in place sound long-term asset management, operating and financing strategies, which support the provision of those services for customers of today and tomorrow.

Those intended outcomes are consistent with the Commission's primary objective of protecting the long-term interests of consumers with respect to the price, quality and reliability of essential services.

### Purpose of this document

In July 2018, the Essential Services Commission (**Commission**) established its framework and approach for SA Water Regulatory Determination 2020 (**SAW RD20**), which is intended to deliver the lowest sustainable prices for the services that SA Water's customers value.<sup>1</sup>

This is the third of a series of Guidance Papers released by the Commission to explain the requirements, methodology and process that will apply to SAW RD20. It discusses minimum customer service and reliability standards for SA Water's services (service standards).

Service standards describe what customers can expect from SA Water and are intended to reflect the quality and reliability levels valued by customers, now and in the long-term. Service standards, and the level they are set at, influence the cost of service delivery, and so are a crucial reference point in defining 'lowest sustainable prices'.

#### This paper provides:

- an explanation of why service standards are important
- an overview of the current regulatory approach to setting SA Water's service standards
- ▶ a summary of SA Water's performance against service standards, and
- discussion of the matters to be resolved in setting service standards for SAW RD20 and the evidence required to address those matters.

The paper includes a series of appendices, which provide supporting detail and context:

- ► Appendix 1 illustrates performance trends for each current service standard
- ▶ Appendix 2 shows how SA Water compares with its peers on key measures
- ► Appendix 3 describes SA Water's work developing a customer-led corporate strategy
- ▶ Appendix 4 lists additional responsiveness requirements in the Water Retail Code Major Retailers, and
- ▶ Appendix 5 contains further information on SA Water's choice modelling study.

SA Water Regulatory Determination 2020, Framework and approach, July 2018, available <a href="https://www.escosa.sa.gov.au/projects-and-publications/projects/water/sa-water-regulatory-determination-2020-framework-and-approach">https://www.escosa.sa.gov.au/projects-and-publications/projects/water/sa-water-regulatory-determination-2020-framework-and-approach</a>

### Why are service standards important?

Setting the maximum revenue requirements for drinking water and sewerage retail services involves undertaking an assessment of the service outcomes SA Water needs to deliver, and the efficient costs of providing those services. This includes, but is not limited to, the costs of meeting the Commission's minimum service standards.

Establishing the minimum service levels involves an assessment of the trade-off between service outcomes (quality and reliability) and price. In competitive markets, the price/service mix is optimised as customers choose the service they prefer from the choices available, given the price of that option. However, SA Water is not subject to competitive forces influencing the price and quality of the retail services it provides. Coupled with revenue regulation, service standard regulation seeks to determine efficient service levels for retail services, given the absence of a competitive market.

The Commission reviews the minimum customer service and reliability service standards that it applies to SA Water alongside its review of the appropriate form of price regulation to apply for those services. These reviews seek to establish standards that are valued by customers, and then assesses the efficiency of SA Water's plans for delivering these standards. Further information on the assessment of the efficient costs of providing drinking water and sewerage retail services is provided in Guidance Paper 4 – Prudent and efficient expenditure. Further information on the approach to regulating the price of excluded services is discussed further in Guidance Paper 2 – SA Water's revenue and prices.

It is important that the minimum service standards reflect SA Water's customers' preferences. They should be set with reference to the elements of service SA Water's customers value, the historical performance outcomes SA Water has delivered, and whether customers are willing to pay for improvements to current service levels or, where possible, accept lower service levels in exchange for lower prices.

The trade-off must also be assessed in the context of South Australian Government's state-wide pricing arrangements, which charges metropolitan and regional customers similar amounts for water and sewerage services, regardless of the difference in the cost of providing services across the state. For more information, see Guidance Paper 2 – SA Water's revenue and prices.

### What is the current regulatory approach?

#### Minimum service standards

Service standards are part of the broader regulatory framework that applies to SA Water. SA Water is required to achieve various service standards set by the Commission as a condition of its retail licence,<sup>3</sup> which is given effect through clause 17 of the Water Retail Code – Major Retailers WRC-MR/02 (**Code**), the Commission's principal consumer protection code applying to SA Water.<sup>4</sup>

There are currently 18 service standards that apply across the drinking water, sewerage and excluded retail service SA Water provides. <sup>5,6</sup> They relate to customer service and complaint handling, connection services, field crew attendance at service issues, and timeliness of service restoration and clean-up. The service

- <sup>2</sup> Section 25(5) of the Essential Services Commission Act 2002.
- Clause 6.3 of SA Water's licence, available at <a href="https://www.escosa.sa.gov.au/ArticleDocuments/1155/20171214-Water-RetailLicenceVariation-SAWaterLicence.pdf.aspx?Embed=Y">https://www.escosa.sa.gov.au/ArticleDocuments/1155/20171214-Water-RetailLicenceVariation-SAWaterLicence.pdf.aspx?Embed=Y</a>
- Water Retail Code Major Retailers WRC-MR/02, July 2016, <a href="http://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-Retail%20Code-MajorRetailersWRC-MR02.pdf.aspx?Embed=Y">http://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-Retail%20Code-MajorRetailersWRC-MR02.pdf.aspx?Embed=Y</a>
- Essential Services Commission of South Australia 2016, Schedule 1: Service Standards, https://www.escosa.sa.gov.au/ArticleDocuments/193/20160701-WaterServiceStandards-July2016toJune2020.pdf.aspx?Embed=Y
- Before 1 July 2016, 66 service standards applied. These are available at: Essential Services Commission of South Australia 2013, Service Standards Schedule 1 July 2013 30 June 2016, <a href="https://www.escosa.sa.gov.au/ArticleDocuments/618/130926-SAWaterServiceStandards\_2013-2016-Schedule.pdf.aspx?Embed=Y">https://www.escosa.sa.gov.au/ArticleDocuments/618/130926-SAWaterServiceStandards\_2013-2016-Schedule.pdf.aspx?Embed=Y</a>. These covered the same broad areas as the current service standards. The rationale for condensing the number of service standards was that this would improve public understanding of the Commission's public reporting on SA Water's performance; and, reduce the statistical distortions that arise from infrequent events.

standards require SA Water to use its best endeavours<sup>7</sup> to meet performance targets. The current service standard targets were set having regard to the average performance of SA Water across 2013-14 and 2014-15. The current service standards are listed, together with performance data, in the following section (see Table 1).

The Commission reports regularly and in detail on SA Water's performance against the current service standards, in its annual Regulatory Performance Reports.<sup>8</sup> These reports address the financial and operational data requirements which are set out in Water Industry Guideline No 2 – Regulatory Information Requirements for Major Retailers.<sup>9</sup> SA Water also publishes quarterly information on its performance against service standards.<sup>10</sup>

In addition to setting service standards, the Code regulates SA Water's broader behaviour when supplying water and sewerage retail services to its customers. It includes provisions relating to customer contracts, payment options, billing, enquiries, complaints and dispute resolution. The Commission will review the consumer protection requirements set out in the Code as part of SAW RD20, publishing a draft for consultation alongside the draft SAW RD20 decision document in February 2020. The final version of the Code will be published with the final SAW RD20 in May 2020.

#### Monitoring performance trends

SA Water's delivery of water and sewerage services is heavily dependent on an efficient and effective asset management system that helps it to optimise its investment decisions by making judgements about how to balance levels of service, risks and lifecycle costs for a diverse portfolio of water and sewerage assets (This is discussed further in Guidance Paper 4 — Prudent and efficient expenditure). However, SA Water has many long-life assets and, consequently, the impact of any under-investment may not become apparent in the level of service provided for some years.

The Commission monitors the long-term trends in SA Water's service performance and actual expenditure to inform itself as to whether or not there are or have been business practices or asset management and investment strategies that could adversely impact service delivery. It holds SA Water to account for explaining its service delivery outcomes and for providing evidence of how it is responding to service issues both in the short and long term.

#### Addressing service delivery issues

Where service standards are not met, the Commission pursues compliance in line with its Enforcement Policy.<sup>11</sup> The following strategies are available:

- general compliance strategies (for example, education, information and assistance, compliance monitoring, or auditing)
- administrative enforcement measures (for example, verbal and written warnings, public reporting, warning notices or District Court injunctions), and
- prosecution and disciplinary action.

In cases of non-conformance with regulatory requirement, the Commission looks to achieve outcomes that benefit consumers. Monitoring, public reporting, and auditing strategies, combined with formal warning letters and requests for formal assurances, are most often used.

As defined in the Code, 'best endeavours' means to act in good faith and use all reasonable efforts, skill and resources.

<sup>&</sup>lt;sup>8</sup> Refer https://www.escosa.sa.gov.au/industry/water/regulatory-reporting/regulatory-performance-reports

<sup>&</sup>lt;sup>9</sup> Essential Services Commission of South Australia 2016, Water Industry Guideline No 2, https://www.escosa.sa.gov.au/ArticleDocuments/952/20160706-Water-GuidelineNo2-MajorRetailers-WG2-03.pdf.aspx?Embed=Y

Refer https://www.sawater.com.au/about-us/our-commitment-to-you/our-performance-scorecard

Essential Services Commission of South Australia 2013, Enforcement Policy Version 2.5, <a href="https://www.escosa.sa.gov.au/ArticleDocuments/580/130905-EnforcementPolicy\_V2-5.pdf.aspx?Embed=Y">https://www.escosa.sa.gov.au/ArticleDocuments/580/130905-EnforcementPolicy\_V2-5.pdf.aspx?Embed=Y</a>

For example, in 2016-17 SA Water did not meet its service standard for processing new connection applications. Initially, the Commission recognised anomalies with performance data. It sought further information and required monthly reports on the relevant service standard from SA Water. It then determined it appropriate and necessary to institute a formal external audit to investigate data management issues. The audit identified that performance data was affected by issues with data collation, verification and handling. SA Water cooperated with the audit, and self-initiated a further audit into service standard performance data more broadly. SA Water is now implementing the remedial actions recommended by both audits, to agreed timeframes, with oversight by the Commission.

### How has SA Water performed to date?

Table 1 lists each of the 18 service standards that currently apply to SA Water. It also summarises SA Water's average performance against each of the service standards over five years (2013-14 to 2017-18). Graphs showing the trend in performance for each service standard are included as Appendix 1. The service standards that relate only to excluded services are shaded in grey.<sup>13</sup>

Table 1: Current service standards and performance targets

Service area	Serv	vice standard	Target	Average performance (2013-14 to 2017-18)
Customer service	1	Telephone calls answered within 30 seconds	85%	86%
and complaint handling	2	Written complaints responded to within the required timeframes	95%	98%
	3	Water quality complaints in metropolitan Adelaide responded to within the required timeframes	96%	98%
	4	Water quality complaints in regional areas of South Australia responded to within the required timeframes	99%	100%
Connection services	5	Connection applications processed within 20 business days	95%	N/A
	6	Water connections constructed within the required timeframes	95%	95%
	7	Sewerage connections constructed within the required timeframes	90%	94%
	8	Trade waste applications processed within 10 business days	99%	99%
Field crew attendance at the	9	Water network breaks, leaks and bursts in the Adelaide metropolitan area attended to within the required timeframes	99%	98%
site of service issues in the Adelaide metropolitan area	10	Sewerage network overflows in the Adelaide metropolitan area attended to within the required timeframes	99%	99%
Service restoration and clean-up in the Adelaide metropolitan area	11	Water network service restorations performed in the Adelaide metropolitan area within the required timeframes	99%	98%
	12	Sewerage network service restorations performed in the Adelaide metropolitan area within the required timeframes	95%	95%
	13	Sewerage network overflow clean-ups performed in the Adelaide metropolitan area within the required timeframes	98%	98%

For a detailed discussion, see page 7-8 of the 2016-17 Regulatory Performance Report, available at https://www.escosa.sa.gov.au/ArticleDocuments/547/20171219-Water-SAWaterPerformanceReport2016-17.pdf.aspx?Embed=Y.

For more information on excluded services, refer to Guidance Paper 2.

Service area	Serv	vice standard	Target	Average performance (2013-14 to 2017-18)
Field crew attendance at the	14	Water network breaks, leaks and bursts in regional areas of South Australia attended to within the required timeframes	99%	99%
site of service issues in regional areas	15	Sewerage network overflows in regional areas of South Australia attended to within the required timeframes	99%	100%
Service restoration and clean-up in	16	Water network service restorations performed in regional areas of South Australia within the required timeframes	99%	99%
regional areas	17	Sewerage network service restorations performed in regional areas of South Australia within the required timeframes	99%	100%
	18	Sewerage network overflow clean-ups in regional areas of South Australia performed within the required timeframes	99%	99%

#### Five-yearly performance against service standards

The Commission considers SA Water's performance against service standards each year by analysing data submitted by SA Water, and publishing annual Regulatory Performance Reports. These examine annual performance and emerging trends.

Over the five year period, SA Water's average performance against the service standards has met or exceeded the targets, other than for two service standards. Those are:

- ▶ Water network breaks, leaks and bursts in the Adelaide metropolitan area attended to within the required timeframes (service standard 9, 98 percent, against 99 percent performance target).
- ► Water network service restorations performed in the Adelaide metropolitan area within the required timeframes (service standard 11, 98 percent, against 99 percent performance target).

In both cases, underperformance of one percent represents a minor deviation from service standard targets.

#### Change within service standards: restoration of partial loss of sewerage services

The Commission monitors an additional 66 service standard measures that previously applied as service standards before 1 July 2016.<sup>14</sup> These cover the same broad areas as existing service standards, and some of the current service standards are aggregates of these measures.

For example, performance against the sewerage network service restoration service standard (standard 12) is the aggregate of four categories. Sewerage services losses are classified as category one (full loss, critical needs customers), category two (full loss, business), category three (full loss, others) and partial loss (all cases without full loss, such as slow drainage of sewerage).

Aggregate measures are useful for summarising performance, but can mask matters of detail. With the example of service standard 12, SA Water has not maintained its performance in restoring partial losses at the 2013-14-2014-15 average. However, this has been offset by performance in other categories, that is, a higher proportion of full losses have been restored within the required timeframes. Accordingly, there has been no decline in the aggregate measure that the Commission monitors.

Essential Services Commission of South Australia 2013, Service Standards Schedule 1 July 2013 – 30 June 2016, https://www.escosa.sa.gov.au/ArticleDocuments/618/130926-SAWaterServiceStandards\_2013-2016-Schedule.pdf.aspx?Embed=Y

## How does SA Water's performance compare with its peers?

South Australia is a signatory to the Intergovernmental Agreement on a National Water Initiative. <sup>15</sup> The Bureau of Meteorology produces annual National Performance Reports on Australia's water industry on behalf of State and Territory Governments to monitor and report on commitments made under this Agreement. <sup>16</sup> These reports include data on trends in pricing and service quality for 84 Australian water utilities.

SA Water's performance can be compared with other major Australian water utilities with more than 100,000 connections (of which there are 14 including SA Water).<sup>17</sup> However, in making comparisons between the water utilities, it is important to realise that there will be some differences in the operating and physical environments of each business that may contribute towards some of the differences in results. This includes factors like:

- ▶ the number of properties connected to the networks
- ▶ the volumes and quality of water treated and delivered and sewage collected and treated
- ▶ the length of the network and the density of customers connected to that network
- boundary definition (between the network and the customer's premises)
- age and type of existing infrastructure.
- soil type and geology, and
- the topography of the area serviced.

With these differences in mind, comparisons between businesses over time can still be helpful for understanding SA Water's performance relative to its peers. Over the 2013-14 to 2017-18 period, relative to the average of its peer group, SA Water had:

- ► fewer complaints, for both water and sewerage services
- longer average duration of unplanned interruptions, for both water and sewerage services
- ▶ fewer water main breaks, bursts and leaks per 100km of water main, and
- ▶ more sewer mains breaks, bursts, and chokes per 100km of sewer main.

Further data and discussion of these comparisons is provided in Appendix 2.

However, where the characteristics of SA Water and other water utilities are markedly different, it is likely to be more helpful to consider trends in SA Water's own historical performance, rather than its performance against its peer group.

The National Water Initiative Agreement is available at <a href="https://www.pc.gov.au/inquiries/completed/water-reform/national-water-initiative-agreement-2004.pdf">https://www.pc.gov.au/inquiries/completed/water-reform/national-water-initiative-agreement-2004.pdf</a>. Further information on the National Water Initiative is available at <a href="http://www.agriculture.gov.au/water/policy/nwi">http://www.agriculture.gov.au/water/policy/nwi</a>

The National Performance Reports and detailed data sets are available at <a href="http://www.bom.gov.au/water/npr/">http://www.bom.gov.au/water/npr/</a>

<sup>&</sup>lt;sup>17</sup> Some of the members of SA Water's peer group have not reported data against each indicator. In these instances, the utility has been removed from the comparisons reducing the peer group from 14 to 13.

### What needs to be considered for SAW RD20?

The Commission expects SA Water to propose a set of service standards for SAW RD20 in its regulatory business proposal (**business plan**). The process and timing for developing the service standards is illustrated in Figure 1. This approach differs from past regulatory determinations, where the Commission has developed the service standards, through its public consultation processes.

Feb 19 to Feb 20 to Until Feb 19 Sep 19 May 20 Feb 20 **Jun 19** Mar 20 Stage 3: Stage 6: Stage 4: Stage 2: Stage 5: Stage 1: **SA Water** Commission Commission Negotiation includes issues final Consultation **SA Water** issues draft Forum tests negotiated service on draft develops service proposed standards in service service proposed standards in service standards in final standards service draft standards its business regulatory standards regulatory determination plan determination

Figure 1: Service standard review timeline

The service standards SA Water proposes may be quite different to the existing service standards. Allowing SA Water this flexibility is important, as it is responsible for engaging with its customers on the price/service mix to apply from 1 July 2020 and the service standards ultimately represent SA Water's commitment to its customers. The proposed service standards, and the evidence used to develop those standards, should be tested in the Negotiation Forum. The Commission will then assess the set of service standards proposed in SA Water's business plan, and consult with stakeholders on the draft standards, as part of its broader review of the Water Retail Code – Major Retailers.

#### What is the scope for possible service standards?

The Commission has not set a limit on the number of service standards that SA Water can propose. However, the rationale for each service standard should be clearly articulated and based on clear evidence. The service standards SA Water proposes should:

- reflect what customers value and are willing to pay for, which should be established through genuine and thorough customer engagement
- ▶ be accessible to customers by being meaningful and easily understood (for example, by not being too numerous or too technical), and
- ▶ link with performance targets that are measurable (using reliable data that is easy to replicate, difficult to manipulate and not costly to obtain).

SA Water's proposal should also include how it will monitor its performance against the service standards, and how it will report back to customers on the service commitments it has made.

The current service standards cover the three broad classes of retail services SA Water provides:

- drinking water services
- sewerage services, and
- excluded services.<sup>18</sup>

See SA Water Regulatory Determination 2016: Final determination, June 2016, available at <a href="https://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-SAWaterRegulatoryDetermination2016FinalReport.pdf.aspx?Embed=Y">https://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-SAWaterRegulatoryDetermination2016FinalReport.pdf.aspx?Embed=Y</a>

SA Water's recycled water, connections and miscellaneous retail services are known as excluded services. They are distinct from SA Water's primary functions of providing drinking water and sewerage services. They provide benefit to individual customers, or a discrete group of customers, rather than to SA Water's customers as a whole.

The Commission encourages the Customer Negotiation Committee to focus on service standards for drinking water and sewerage services, rather than excluded services, as excluded services are a small component of SA Water's regulated business (accounting for six percent of revenue) and they provide benefits to individual customers, or a discrete group of customers, rather than to SA Water's customers as a whole.

However, it is important that those services and service levels reflect customers' preferences, which requires evidence from customer engagement. SA Water will need to provide evidence that it has proposed service standards for excluded services that reflect what customers of those services value and are prepared to pay for. It is also important that fees and charges for excluded services are reflective of efficient costs, so that customers do not pay excessive prices. The approach to regulating the price of excluded services is discussed further in Guidance Paper 2 – SA Water's revenue and prices.

The Commission understands that SA Water's intention is to include service standards that relate to the Strategic Element Measures that support its corporate strategy. This would be an appropriate basis for service standards, noting that individual Strategic Element Measures may have underlying metrics and performance targets (some included in external reporting, and some for internal use only).

Elements potentially in-scope as service standards include:

- those in current service standards
- ▶ those in previous service standards (for example, the 66 that applied in SAW RD13)
- ▶ additional service reliability measures (discussed further below)
- ► those used in the National Performance Report data (such as those relating to service levels listed Appendix 2), or
- ▶ other time-specific elements in the Code. (The Code contains further specific requirements for SA Water in responding to customer requests which are not currently identified as service standards. These are listed in full in Appendix 4).

A consideration in proposing service standards is that consistency in elements over time allows for a better understanding of whether SA Water's performance is improving or not. However, where service standards do change for SAW RD20, SA Water will be required by the Commission to provide historical data (if available) as the basis for ongoing comparison.

Matters regulated by other agencies (for example, environment protection, public health, safety and technical requirements) should not be included, unless there is evidence that levels of service beyond the minimums set by those agencies are valued by customers.

#### Establishing what customers value and are prepared to pay for

Evidence from customer engagement must support the inclusion of each service standard. Customer engagement techniques such as surveys, focus groups, and interviews would be sufficient to identify the broad areas of service that matter to customers. Engagement should be with a representative sample of customers, and capture the different needs of different customers.

To satisfy the Commission that its engagement has been appropriate, SA Water needs to demonstrate that it has proposed service standards that reflect all issues raised by customers (to the extent they can be controlled by SA Water) and that SA Water has not ignored inconvenient or difficult issues. If issues are out-of-scope, there should be an explanation of why. SA Water's recent approach to customer engagement for the purpose of developing its corporate strategy is described in Appendix 3.

The levels of service (or performance targets) should also be proposed. Levels of service should be defined by understanding what SA Water's customers' value, relative to the cost of providing that service.

Willingness to pay research quantifies the value of non-market goods or services (such as new services, or changes to service levels) for input into economic assessment. Types of willingness to pay research include contingent valuation and choice modelling. Contingent valuation is the most straightforward 'stated preference' technique. It surveys people to ask how much they are willing to pay for a good or service. Choice modelling asks people about their preferences for different 'packages' of service, then uses survey responses to model the value of those services.

For each service element, SA Water should:

- ▶ demonstrate engagement with customers on a range of service levels (including keeping service the same, reducing service and improving service)
- demonstrate that it has engaged with its customers regarding the associated costs (or savings) of each service level, and
- quantify the willingness to pay of customers for those service levels, both in terms of average willingness to pay (across the whole customer base), and distribution of willingness to pay (showing those willing to pay nothing, through to those willing to pay the highest amounts).

SA Water has already conducted a choice modelling study to identify:

- which elements of its services customers valued, by assessing how much they were willing to pay for those service elements, and how closely that amount aligned with the cost of possible future investment opportunities, and
- which elements of service customers did not value, by assessing how much of a bill reduction they expected if those services were reduced, and how realistic these expectations were, given the cost reductions SA Water thought it could achieve.

Further information on SA Water's choice modelling study is provided in Appendix 5.

SA Water's study has helped it to better understand what aspects of service its customers value, and the relative importance its customers place on service and price.

However, given the nature of the price/service trade-off discussion required for SAW RD20, further research is required to provide the evidence that customer value each of the proposed service standards that SA Water plans to include in its business plan, including any associated performance targets. This includes being able to provide evidence that:

- > SA Water has resolved the tension between reducing prices and investing in service improvements, and
- customers have been able to prioritise service options using information about the efficient costs of providing those services.

#### The tension between reducing prices and investing in service improvements needs to be resolved

The Commission understands that the results of the study, so far, show that price is the most important factor in customers' decision making. Improvements in service are secondary, but customers are willing to pay for some service improvements.

Additional work is required to resolve the tension between reducing prices and investing in service improvements. For example, SA Water will need to be able to demonstrate how it has considered the following issues in developing the final set of proposed service standards:

▶ What were the service levels included in the survey, and why?

For each of the 19 service areas, a range of service levels were included. These spanned keeping service the same, improving service, and for some elements, reducing service levels. SA Water should provide a rationale for the levels of service presented (this may include, for example, instances where other regulatory requirements prevent service reductions being considered).

► How is willingness to pay distributed across the customer group? Has SA Water considered implications of setting service standards where it may not be supported by the whole customer base?

The results from SA Water's study need to be analysed to assess the diversity of the responses provided, including the distribution between customers who were willing to pay nothing and customers willing to pay up to the highest amounts. SA Water should demonstrate that it has considered the impact on individual customer groups, such as those experiencing bill stress.

▶ How do the actual costs of changing service levels compare with customers' willingness to pay?

The Commission understands that SA Water will now compare customers' willingness to pay with costs of delivering service level changes in a desktop analysis. This will reveal which have a positive net benefit.

▶ What does it mean that price is the most important factor in customers' decision making, yet many customers are willing to pay for many service improvements?

SA Water should demonstrate how it has attempted to answer the question: 'is bill impact so important that customers would prefer no change to service levels to keep their bill constant, or would accept service decline to achieve a bill reduction?'

#### Prioritising service options using information about the efficient costs of providing those services

SA Water's study presented customers with service 'packages' and asked them to choose which they prefer. Each of the service packages had an associated cost, displayed as the impact on the customers' current bill. However, customers were not shown the actual costs of changing the levels of service they were presented. Rather, the costs were 'hypothetical' to try to draw out the 'value' customers placed on the various service elements.

Presenting hypothetical costs in willingness to pay research is a common approach to testing the value of products in competitive markets. However, SA Water does not provide water and sewerage services in a competitive market. Its regulated revenue is set with reference to the efficient costs of providing those services. In this context, the purpose of quantifying willingness to pay is not to work out the maximum amount customers can be charged, but to establish if customers consider services worthwhile, given the costs of providing them. Presenting actual cost information is extremely important, as customers cannot leave the market, and investment decisions—particularly capital expenditure decisions—are long-term.

Further, the cost information provided must accurately represent what would be recovered from customers through being included in the revenue determination, after any contributions from the State Government's state-wide pricing mechanism have been accounted for. The state-wide pricing mechanism provides funds so that SA Water charges regional customers similar amounts for water and sewerage services as customers in metropolitan areas, where the costs of providing services to regional customers may cost more. For more information, see Guidance Paper 2 – SA Water's revenue and prices.

#### Is network reliability clearly reported to customers?

SA Water should consider whether service standards relating to underlying network performance (incidence and duration of interruptions) should be introduced for the 2020-2024 regulatory period.

Information about the reliability of SA Water's network is included in its annual Safety, Reliability, Maintenance and Technical Management Plan, which is reviewed by the Technical Regulator. However, there may still be value in developing service standards in this area that have more of a customer focus.

In its regular reporting on SA Water's performance, the Commission comments on interruptions to water and sewerage services. That is, the incidence of interruptions (per 1,000 properties) and the average annual duration of interruptions for those customers who experience outages (minutes).

Monitoring the trends for these indicators for water services has shown from 2013-14 until 2017-18:

- ▶ there was a decrease in the number of water network supply interruptions (per 1,000 customers)
- ▶ those interruptions have been concentrated among a smaller group of customers (the number of customers experiencing three or more interruptions), and
- the average duration of unplanned interruptions, for those customers that experience an outage, has increased.

In relation to sewerage services, there was a decrease in the incidence of unplanned sewerage network supply interruptions and the duration of interruptions. However, sewerage mains breaks and chokes and property connection breaks and chokes, which follow a similar pattern, have been volatile.

These measures provide an important perspective on the service customers experience, however, they are not part of the current set of service standards. Service standards currently relate only to the time it takes crews to attend interruptions, and the time taken to restore service.

#### What should be measured: responsiveness or satisfaction?

SA Water should consider whether service standards should continue to relate to responsiveness (for example, timeframes for complaint response, attendance, fault restoration), focus on customer satisfaction measures (for example the quality of the responses provided and broader customer sentiment), or some combination of both.

As part of SAW RD16, the Commission noted that the current service standards focus of SA Water's operational responsiveness (time taken to respond to a matter), rather than the level of customer satisfaction with the services provided. While this issue was not resolved, SA Water signalled its intention to trial moving towards 'first contact' resolution of service issues, noting that this was likely to result in longer average call times.

Customer satisfaction measures recognise that responsiveness is only one element of customer service and responsiveness measures (timeframes for answering enquiries) do not capture communication quality. Communication quality measures cut across communication channels and can capture use of hard to measure channels like social media.

Communication quality and satisfaction measures already exist that may be worth further consideration. For example, the economic regulator of the water sector in England and Wales (Ofwat) uses a composite measure as the basis of its service incentive mechanism.<sup>19</sup>

Ofwat, 2018, Customer service incentive mechanism, https://www.ofwat.gov.uk/regulated-companies/companyobligations/customer-service/

#### Do customers want a guaranteed service level scheme?

Some service standard regimes include financial incentives and/or penalties. Some schemes are funded by customers, while others act as a penalty on the regulated business.

#### Financial incentive and penalty schemes

The purpose of a financial incentive/penalty scheme can be broad and look to provide the regulated business with an incentive to improve average service levels, where it is economic to do so, and penalise the regulated business when minimum service levels are not met.

Financial penalties for underperformance are generally made at the end of a regulatory year, or could be assessed at the end of the regulatory period. Typically, such penalties are not paid directly to customers, and are not provided for in the business' revenue allowance. Instead, they are funded from the regulated business' returns; for example as a reduction in revenue allowance for the next period.

In developing such a scheme, the financial incentives and penalties would need to be set at a level sufficient to achieve the intended behaviour in the business to seek to improve service outcomes for customers. However, there is a tension in providing the regulated business with an incentive to improve service over time, where customers have not expressed support for service improvements through a willingness to pay study.

The Commission does not consider such a scheme is necessary for SAW RD20, given there are no material or persistent issues with SA Water's performance against the current service standards.

#### **Guaranteed Service Level Scheme**

An alternative form of financial incentive/penalty scheme is a Guaranteed Service Level (**GSL**) scheme that makes payments to individual customers who experience poor service. Typically, GSL scheme payments do not compensate customers for any losses they experience as a result of poor service; they are simply a customer service gesture. The amount of the payments to individual customers tend to be small.

While not always the case, GSL schemes are generally funded by all customers, with an allowance made for an expected level of GSL payments provided for in the revenue allowance.

The total cost of GSL schemes, and/or the value of individual payments, need to be quite high in other to act as an incentive for improved performance.

There is a similar tension in trying to provide the regulated business with an incentive to improve service, where it is funded by customers, where customers have not expressed support for service improvements through a willingness to pay study.

SA Water would need to provide clear evidence that customers valued and were prepared to pay for such a scheme if it was included as part of the set of proposed service standards.

## Appendix 1: Performance trends for the current service standards (2013-14 to 2017-18)

Figure 2: Service standard 1 - 85% of telephone calls answered within 30 seconds, 2013-14 to 2017-18

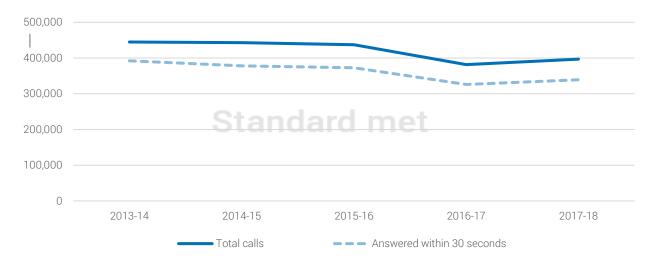


Figure 3: Service standard 2 - Written complaints responded to within required timeframes, 2013-14 to 2017-18

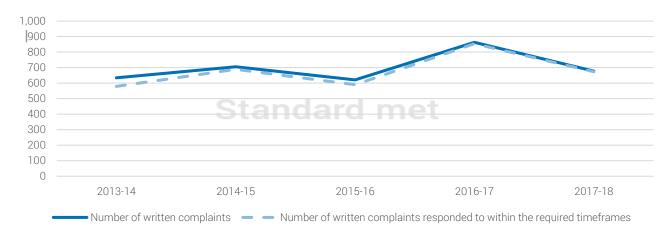


Figure 4: Service standard 3 – water quality complaints in metropolitan Adelaide responded to within required timeframes, 2013-14 to 2017-18

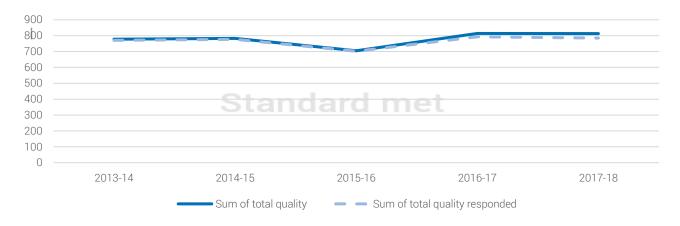


Figure 5: Service standard 4 – water quality complaints in regional areas of South Australia responded to within required timeframes, 2013-14 to 2017-18



Figure 6: Service standard 6 – water connections constructed within required timeframes, 2013-14 to 2017-18

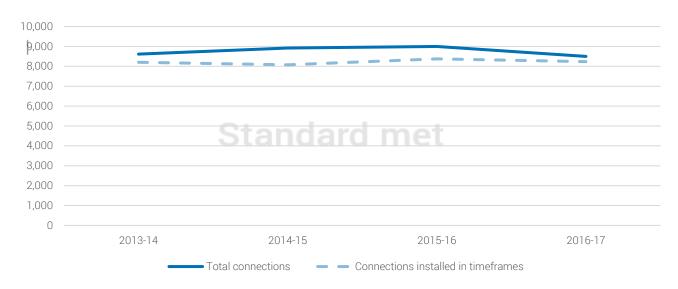


Figure 7: Service standard 7 – sewerage connections constructed within required timeframes, 2013-14 to 2017-18

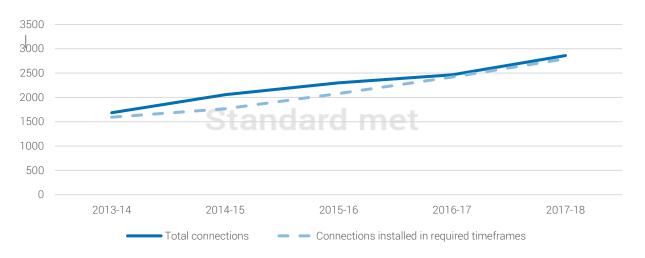


Figure 8: Service standard 8 – trade waste applications processed within 10 business days, 2013-14 to 2017-18

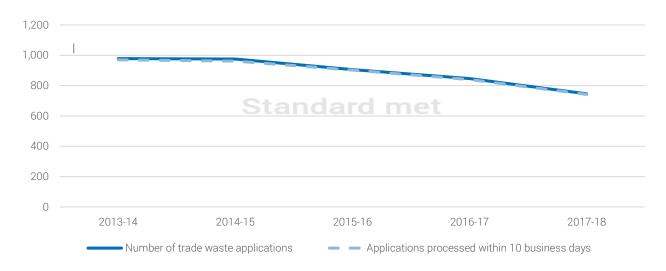


Figure 9: Service standard 9 – Water network breaks, leaks and bursts in the Adelaide metropolitan area attended to within required timeframes, 2013-14 to 2017-18

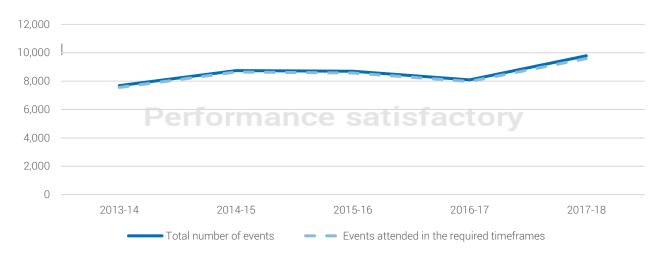


Figure 10: Service standard 10 – Sewerage network overflows in the Adelaide metropolitan area attended to within required timeframes, 2013-14 to 2017-18

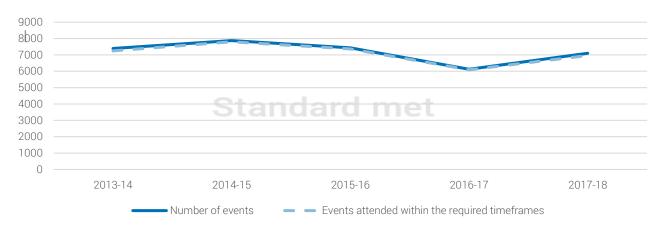


Figure 11: Service standard 11 – Water network service restorations performed in the Adelaide metropolitan area within required timeframes, 2013-14 to 2017-18

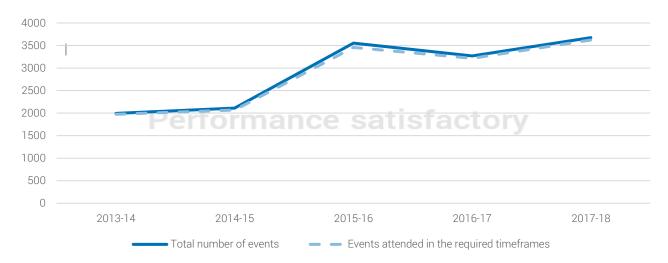


Figure 12: Service standard 12– Sewerage network service restorations performed in the Adelaide metropolitan area within required timeframes, 2013-14 to 2017-18

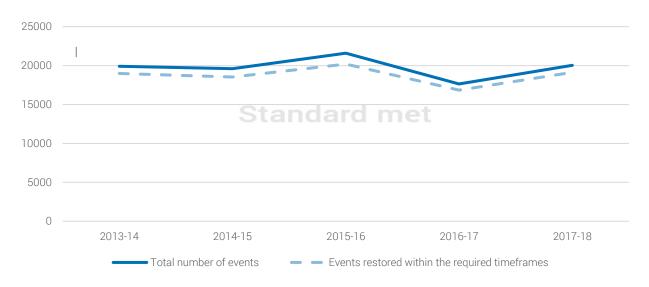


Figure 13: Service standard 13 – Sewerage network overflow clean-ups performed in the Adelaide metropolitan area within required timeframes, 2013-14 to 2017-18

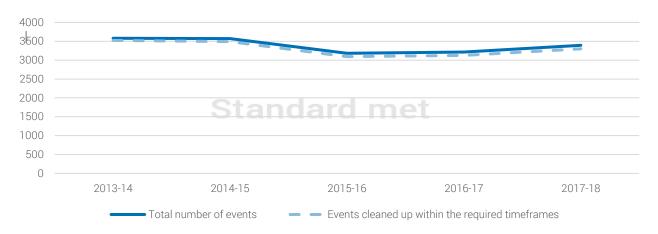


Figure 14: Service standard 14 – Water network breaks, leaks and bursts in regional areas of South Australia attended to within required timeframes, 2013-14 to 2017-18

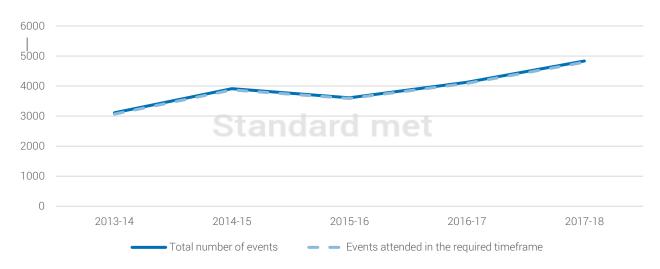


Figure 15: Service standard 15 – Water network breaks, leaks and bursts in regional areas of South Australia attended to within required timeframes, 2013-14 to 2017-18

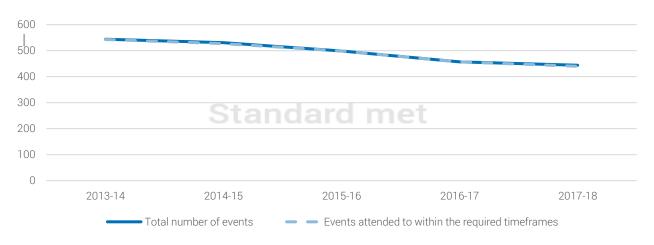


Figure 16: Service standard 16 – Water network service restorations performed in regional areas of South Australia within required timeframes, 2013-14 to 2017-18

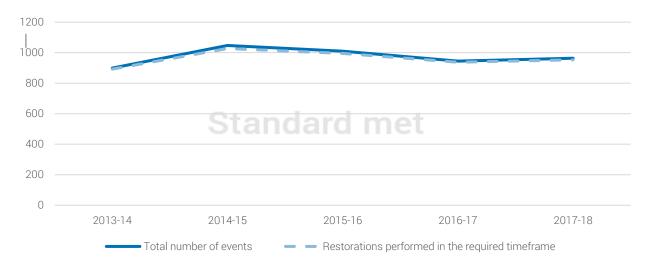


Figure 17: Service standard 17 – Sewerage network service restorations performed in regional areas of South Australia within required timeframes, 2013-14 to 2017-18

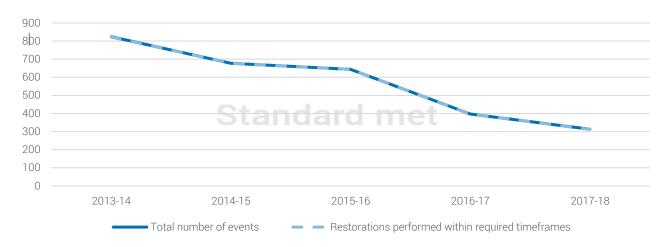
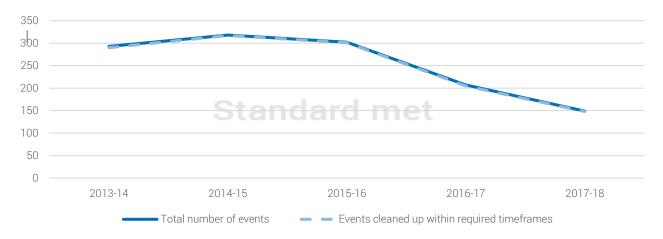


Figure 18: Service standard 18 – Sewerage network overflow clean-ups in regional areas of South Australia performed within required timeframes, 2013-14 to 2017-18



Note: Performance against service standard 5 has not been included, due to issues with data collation, verification and handling. (For a detailed discussion, see page 7-8 of the 2016-17 Regulatory Performance Report).<sup>20</sup>

The 2016-17 SA Water Regulatory Performance Report is available on the Commission's website at <a href="https://www.escosa.sa.gov.au/ArticleDocuments/547/20171219-Water-SAWaterPerformanceReport2016-17.pdf.aspx?Embed=Y.">https://www.escosa.sa.gov.au/ArticleDocuments/547/20171219-Water-SAWaterPerformanceReport2016-17.pdf.aspx?Embed=Y.</a>

### Appendix 2: How SA Water compares with its peers, 2013-14 to 2016-17

#### Complaints received

**Error!** Reference source not found. shows how SA Water compares with its peers on the number of complaints received, on a per 1,000 connected properties basis.

Table 2: Performance against National Performance Report metrics (2013-14 to 2016-17)

Key Result Area Metric and measure		SA Water four year average	Four year average (median) of 13 other major Australian water utilities
Complaints	Number of water service complaints per 1,000 properties.	0.2	0.4
Complainto	Number of sewerage service complaints per 1,000 properties	0.1	0.4

SA Water reported an average of 0.2 complaints per 1,000 properties for its water services over the period 2013-14 to 2016-17. This was a lower level of complaints than the majority of its peer group. It also reported a low level of complaints for its sewerage services over this same period, at an average of 0.1 complaints per 1,000 properties.

#### Service interruptions

Table 3 shows how SA Water compares with its peers on the average duration of interruptions to service (in minutes per year customers are without supply).

Table 3: Performance against National Performance Report metrics (2013-14 to 2016-17)

Key Result Area	Metric and measure	SA Water four year average	Four year average (median) of 13 other major Australian water utilities
Interruptions	Average duration of unplanned interruptions: water supply (minutes)	176.2	136.0
	Average duration of an unplanned interruption: sewerage (minutes)	389.7	158.9

The average duration of SA Water's unplanned water interruptions is high compared with its peers. This has increased from 161 minutes in 2013-14 to 195 minutes in 2016-17.

One contributing factor is different operating procedures between the businesses in the peer group.

Specifically, in 2015-16, SA Water implemented a work safety procedure requiring water supply to be turned off to complete cast iron pipe repairs, due to risk of pipe ruptures if repairs are completed under pressure. This practice is not widespread amongst other major water utilities, and impacts on average duration of unplanned water interruptions.

Cast iron pipes make up approximately 25 percent of water and sewerage pipes in South Australia. Most of these pipes were laid in the 1960s, and are susceptible to deterioration caused by corrosion over time. Prior to

2015, these pipes were repaired under pressure, and water supply did not need to be interrupted. As the condition of cast iron pipes continues to decline, repairing under pressure carries the risk of pipes rupturing, and shrapnel being blasted into the surrounding area. There were two near-miss incidents in 2015. Therefore, from 2015, SA Water has not carried out these repairs under pressure. Now, water supply is turned off before repairs occur. There was a notable increase in average duration of unplanned water interruptions that occurred between 2014-15 (163 minutes) and 2015-16 (186 minutes), the same time that this procedure was introduced.

The average duration of SA Water's unplanned sewerage interruptions is also high compared with its peers. In 2016-17, its performance of 379 minutes was the highest of all major water utilities (noting that not all report on this metric). Its 2016-17 performance represents an increase from 2013-14 (354 minutes), but a reduction on 2014-15 (405 minutes) and 2015-16 (421 minutes).

One contributing factor is that, unlike many of its peers, SA Water has responsibility for the wastewater connection from the boundary of its customer's premises (for example, at the fence or inspection point). For other water utilities, responsibility starts where the pipe connecting the customer meets the sewer main (for example, under the road). This means more incidents are captured in SA Water's performance data.

#### **Asset management**

**Error! Reference source not found.** shows how SA Water compares with its peers on two metrics which relate to asset management.

Table 4: Performance	against Nationa	l Performance Re	port metrics (	(2013-14 to 2016-17)	

Key Result Area	Metric and measure	SA Water four year average	Four year average (median) of 13 other major Australian water utilities
Asset management	Number of water main breaks, bursts, and leaks per 100 km of water main	13.4	21.5
	Number of sewer mains breaks and chokes per 100 km sewer main	47	29.1

SA Water had fewer water main breaks, bursts and leaks per 100km of water main than many of its peers. Its performance has been consistent over the last four years.

SA Water had more sewer mains breaks, bursts, and chokes per 100km of sewer main than many of its peers. Performance has varied, from 46 in 2013-14, increasing to 51 in 2015-16, and falling to 43 in 2016-17.

As with Table 2 and Table 3, these data do not take into account variables that differ for each business, including number of connections and topography of the area serviced, which need to be considered to make direct comparisons.

## Appendix 3: Developing a customer-led corporate strategy

The Commission understands that SA Water's intention is to include service standards that relate to the 'Strategic Element Measures' in its corporate strategy. SA Water intends that these measures should reflect the services its customers want and value, identified through customer engagement.

SA Water is of the view that, ahead of developing the corporate strategy, through its ongoing customer research and engagement work, it already knew a lot about what its customers thought, and how satisfied they were with its services.<sup>21</sup> On that basis, SA Water developed six broad customer outcomes in response to the common themes:

- safe water
- reliable services
- supporting the community
- great customer service
- healthy environment, and
- fair prices.

It then tested how important its customers thought it was for it to achieve each of these outcomes.<sup>22</sup> Customers were asked to choose the most important and least important things that SA Water could focus on. Overall, customers told SA Water that they have some core, basic needs that need to be met before it should consider investing in other areas.

SA Water was told its first priority should be focusing on providing safe, reliable, sustainable and high quality water, while assuring price and service stability. The main drivers of satisfaction with SA Water's current performance were experiencing great customer service, support and fairness when service issues arose.

Providing safe water was consistently identified as the most important thing that SA Water should focus on. The clear second priority was to minimise interruptions. After these two issues, customer views differed on the importance of the next most important focus area between assurance of price and service stability, consistent high quality water, or water security.

The divergence in responses were in part driven by whether or not a customer reported experiencing bill stress. As customers start to struggle more with bill stress, they value support and care more highly than those who are not experiencing bill stress. For customers who are not struggling, water security and the environment were more important that support and fairness.

SA Water states that its corporate strategy broadly reflects what it heard from customers through its commitment to 'getting the basics right every time'. It has stated its intention for 2018-2028 is to 'put customers at the heart of everything it does' as it tries to deliver 'world class water services for a better life'. Its proposed strategic element measures are intended to drive this.

<sup>&</sup>lt;sup>21</sup> <a href="https://www.sawater.com.au/community-and-environment/community/customer-research-and-engagement">https://www.sawater.com.au/community-and-environment/community/customer-research-and-engagement</a>

<sup>&</sup>lt;sup>22</sup> Colmar Brunton, SA Water, What's important to our customers, June 2017.

## Appendix 4: Additional responsiveness requirements in the Water Retail Code – Major Retailers

The Water Retail Code – Major Retailers includes specific requirements around the maximum time SA Water can take to respond to various types of customer requests, outlined below in Table 5. This covers areas such as information provision, resolving billing and payment issues and the timely restoration of service following a restriction of services for non-payment.

Table 5: Time specific service requirements in the Water Retail Code – Major Retailers

Section	Service requirement	Timeframe
1	Customer information	
1.5	Provide copy of industry code or standard contract	10 business days
2	Customer charter	
2.3.1	Advise customer of availability of customer charter, following entry to standard contract, and send a copy or approved summary if requested	As soon as practicable, no later than first bill
5	Price disclosure	
5.1	Provide copy of schedule of prices, fees and charges	10 business days
7	Leak monitoring and notification	
7.1.1	Inform customer that systems indicate an abnormal change in consumption	As soon as reasonably practicable
9	Life support equipment	
9.1.1 (a)	Written notice of planned interruption	4 business days
10	Customer hardship policies	
10.1.1 (d)	Send copy of hardship policy following request	As soon as practical
11	Provision of retail services	
11.2.3	Withdraw offer to supply if not accepted	60 business days
14	Connections	
14.2.4	Arrange connection where retailer does not own or operate the network by forwarding customer's details to the relevant owner or operator and ensuring connection is effected within timeframes set out in service standards	As soon as possible after receiving application (best endeavours)
15	Termination of retail services	
15.1.1	Notice customers must provide to terminate standard contract	3 business days
15.3.1	Meters read on date customer intends to vacate a supply address	On that date (or as soon as possible afterwards if customer has not provided access, best endeavours)
15.4.1 (c)	Meters must be read for a vacated address after retailer becomes aware customer has vacated	3 business days
16	Retailer supply obligations	
16.1.1	Minimise interruptions or limitations to supply and restore supply following and interruption or limitation	As soon as practicable (best endeavours)

Section	Service requirement	Timeframe
16.1.2 (a)	Restore retail services following unplanned interruptions caused by a burst, leak, blockage or spill, including prompt attendance and actions	As soon as practicable (and within times required by service standards)
16.3.1	Provision of emergency telephone service to enable a customer to access details of interruption to supply and for notification of emergencies and faults	24 hour service
16.3.2	Notice of planned interruption, unless otherwise agreed	4 business days
16.4.1(b)	Allowance for customer to resolve health and safety reason for disconnecting or restricting supply	5 business days
16.4.1(c)	Additional notice required to disconnect or restrict for a health and safety reason	5 business days
16.5.1	Entry to supply address to connect, disconnect or restrict supply or inspect, repair or test an installation	24 hours
16.5.2	Explanation of unplanned interruption or maintenance, in writing if requested by customer	10 business days
18	Billing	
18.5.1	Ensure an actual meter reading at customer supply address (best endeavours)	At least once every 12 months
18.9.1	Minimum pay by date for bills (days after bill sent)	12 business days
18.10.2	End of reminder notice period (state on reminder notice)	5 business days
18.11.2	Provision of billing data for previous two years, at request of customer and free of charge	10 business days
	Best endeavours provision of billing data beyond previous two years, at request of customer, for a reasonable charge	20 business days
19	Changes in tariff types or rates	
19.4.1	Transfer to an alternative tariff, if application received and all conditions met	10 business days
20	Billing disputes	
20.1.2	Inform customer of outcome of bill review	20 business days
22	Overcharging	
22.1.1	Inform customer of overcharging and credit to next bill	10 business days
	Repayment of overcharged amount if customer has ceased to purchase retail services	10 business days
22.1.3	Repayment of overcharged amounts following access to address not being allowed by customer for more than 12 months	After actual meter reading
23	Payments	
23.6.4	Notice that customer has been placed on shorted collection cycle	10 business days
25	Payment difficulties and flexible payment plans	
25.1.1	Offer and apply flexible payment plans for residential customers experiencing payment difficulties	As soon as is reasonable practical
26	Restriction of water supply	
26.1.2	Period after issue of restriction warning notice allowed for customer to rectify matter before restriction (other than for non-payment)	5 business days

Section	Service requirement	Timeframe
26.4.1	Notice given in restriction warning notice for non-payment of bills, following reminder notice period	5 business days
28	Restoration of supply	
28.3.1	Reconnection of removal of flow restriction where customer has satisfied clause 28.1 before 12pm on a business day	On day of request (metro Adelaide)
		On day of request (best endeavours, outside metro Adelaide) and by end next business day
28.4.1	Reconnection of removal of flow restriction where customer has satisfied clause 28.1 after 12pm on a business day	On day of request (best endeavours) and by end next business day
29	Force majeure	
29.2.1	Make information available through a 24 hour information service where the effects of a force majeure event are widespread, following being advised of the event	Within 30 minutes
30	Appointment of operator	
30.3.1	Time to provide name, address and billing details to appointed operator if retailer is no longer entitled to provide retail services	1 business day

## Appendix 5: Background on SA Water's choice modelling study

In preparing for SAW RD20, SA Water has conducted a choice modelling study, to explore which service standards, and what levels of service, its customers are willing to pay for: the 'the What Matters To You survey'. The survey was conducted in May 2018, with a sample size of 4,850 residential customers and 204 business customers.

The study tested customers' willingness to pay for service levels across the following 19 areas:

- funding opportunities that benefit the state economy
- ▶ time to fix minor issues such as leaking water meters
- support for customers who cannot pay their bills
- number of customers who cannot pay their bills
- time to restore water outages
- ▶ time taken to restore an interrupted sewerage service
- ▶ a support team for regional SA for major incidents, for example water main breaks or sewerage overflows
- number of sewer overflows to the environment per year
- ▶ amount of used water recycled into reusable water
- number of sewer blocks per year
- ▶ total number of internal sewerage overflows in a year (for customers with a sewerage service)
- water pressure to reduce water main breaks
- ▶ time taken to fix a leaking water main which has not interrupted supply to customers
- leakage from underground pipes
- recycled water for community spaced
- recreational use of reservoirs
- ▶ high quality drinking water for regional areas with poorer quality
- upgrading water for 650 regional properties from non-drinking water to drinking water, and
- ▶ taste of Adelaide metro water.

Some of these service areas relate directly to the current service standards:

- ► Time to restore water outages
- ► Time taken to restore an interrupted sewerage service
- ► Number of sewer blocks per year
- ► Total number of internal sewerage overflows in a year, and
- ▶ Number of sewer overflows to the environment per year.

Others are clearly in scope for revised service standards for SAW RD20 (either for water and sewerage or excluded services), and some relate to service elements that are for commercial or community services.

In stage one of the survey, two bundles of services were presented to customers, each containing a range of service levels for 12 of the 19 service areas (mixed up automatically so all 19 were represented across the sample). Each service element had an associated cost. Customers picked their preferred package. In stage two of the survey, customers were asked if they would prefer the option they had just chosen, or their current service levels and bill. Each task was repeated six times.

However, the costs presented were hypothetical. Customers were not presented with actual costs of implementing changes to levels of service, although SA Water provided its market research consultant with indicative cost information so that the hypothetical price impacts were broadly in line with the costs of providing the options. The indicative costs (and savings) of the higher (and lower) level of service scenario provided by SA Water to its market research consultant ranged from savings of a maximum of \$11 up to additional costs of \$213 per customer per annum.

The results are able to be used to model customers' willingness to pay for changes in service levels, both on average (across the whole customer base), and as distributions (showing customers willing to pay up to the highest amounts).