Water

SA Water Regulatory Determination 2020: Guidance paper 2

SA Water's revenues and prices

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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

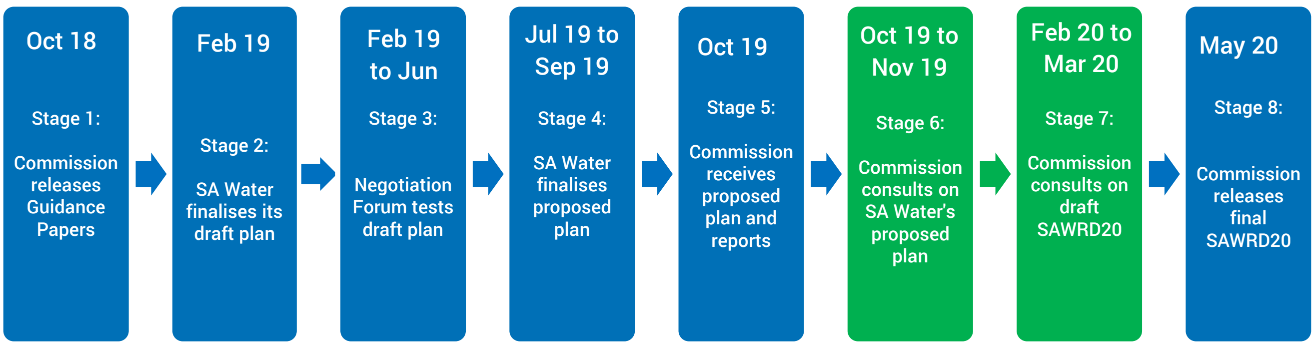
Timing for this review and upcoming consultation opportunities

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



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.[1]

This is the second of a series of Guidance papers released by the Commission to explain the requirements, methodology and process that will apply to SAW RD20.

This Guidance Paper explains how the Commission will:

- determine SA Water's maximum drinking water and sewerage revenues to apply from 1 July 2020 to 30 June 2024, using a cost-based (building blocks) approach and
- regulate the price of recycled water, connections and other retail services provided by SA Water (**excluded services**), using a pricing principles approach.

This paper discusses both of those functions as forms of "price regulation", as both are types of price determinations that the Commission is empowered to make under the Essential Services Commission Act 2002 and Water Industry Act 2012.

This paper provides:

- an overview of why price regulation is important in protecting the long-term interests of SA Water's customers
- a summary of the Commission's current approach to price regulation
- information about trends in SA Water's revenues and prices since the Commission made its first regulatory determination in 2013
- discussion of the matters that need to be resolved in determining SA Water's drinking water and sewerage revenues and prices for excluded services.

The methodologies and processes discussed in this paper should be taken into account by SA Water as it develops its business plan for 2020-2024 and the by Negotiation Forum as it reviews that plan in early 2019. Further information about those processes is contained in the Commission's Framework and Approach paper and Guidance Paper 1 - Overview of SA Water Regulatory Determination 2020.

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[1] SA Water Regulatory Determination 2020, Framework and approach, July 2018, available https://www.escosa.sa.gov.au/projects-and-publications/projects/water/sa-water-regulatory-determination-2020-framework-and-approach

Why is price regulation important?

To provide water and sewerage services, SA Water incurs costs in building, maintaining and operating an extensive network of physical assets that can have very long lives, sometimes over 100 years. SA Water's customers pay for those costs through the water and sewerage prices set by SA Water.

The Commission's price regulation function is intended to provide SA Water with incentives to incur efficient costs in providing water and sewerage services. As a monopoly supplier of those services, SA Water may not face the same incentives to incur only efficient costs as would other businesses that are subject to competition.

Given the long-term nature of SA Water's assets, price regulation must have a long-term focus. It must recognise the need for SA Water to provide regulated services for present and future generations. Setting revenues to recover the lowest sustainable cost for a given level of service seeks to achieve the outcome where SA Water has sufficient revenue to efficiently deliver the services valued by customers, in the long-term. The Commission is not seeking to deliver low prices in the short-term at the expense of long-term service delivery. That would be inconsistent with the Commission's requirement to protect the long-term interests of SA Water's customers.[2]

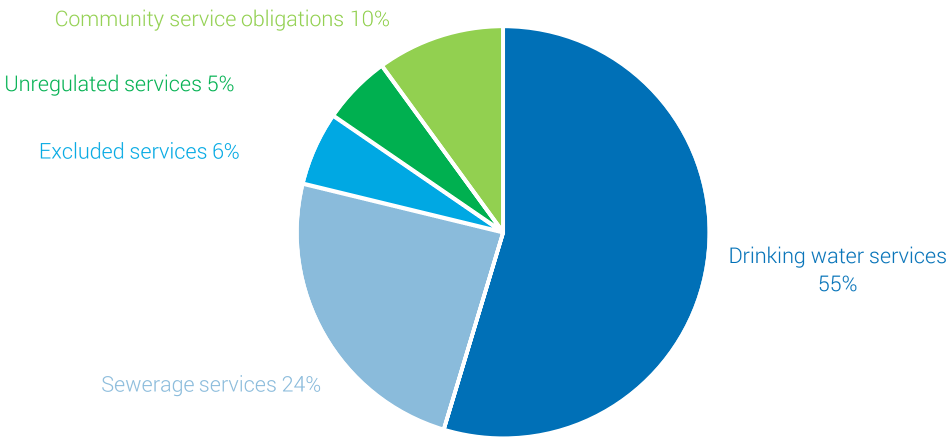
What makes up SA Water's revenues?

The majority of SA Water's total revenue each year comes from customers paying for drinking water and sewerage services. In 2016-17, SA Water's total revenue was around $1.37 billion, with $1.07 billion (nearly 80 percent) coming from the sale and supply of drinking water and sewerage services.[3] Revenue from the sale of excluded services made up around 6 percent of SA Water's revenue. Unregulated services (which include commercial services provided by SA Water such as water quality testing services) make up around 5 percent of SA Water's revenue.

The State Government subsidises certain non-commercial services provided by SA Water (Community Service Obligations). The major subsidy relates to the State Government's contribution towards statewide pricing (a subsidy of over $100 million per annum), which allows SA Water to charge the same drinking water and sewerage prices to metropolitan and regional customers. Further information about the Community Service Obligations and transfers between SA Water and the State Government is contained in Appendix 1.

The breakdown of SA Water's revenue in 2016-17 is shown in Figure 1.

Figure 1: Breakdown of SA Water's 2016-17 revenue



2 See section 6(1) of the Essential Services Commission Act 2002.

3 As per SA Water's 2016-17 Regulatory Accounts, provided to the Commission pursuant to Water Industry Guideline No. 2 – Information requirements for major retailers.

Current regulatory approach

The provisions of the Essential Services Commission Act and the Water Industry Act allow for the regulation of prices, revenues and related factors by the Commission. In making a determination, the Commission undertakes an assessment of:

- the costs to make, produce or supply the retail services
- the costs to comply with laws and regulatory requirements (including, but not limited to, the consumer protections and minimum service standards developed by the Commission)
- the return on assets in the regulated industry
- any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries, and
- the financial implications of its determination on SA Water.

Regulating revenues for drinking water and sewerage services

The Commission currently regulates the maximum revenues that SA Water may earn from drinking water and sewerage services. It does not determine SA Water's drinking water and sewerage prices, as there are various policy drivers of those prices, outside of the scope of economic regulation. However, SA Water must set its drinking water and sewerage prices to deliver revenue outcomes that comply with the respective maximum revenues set by the Commission.

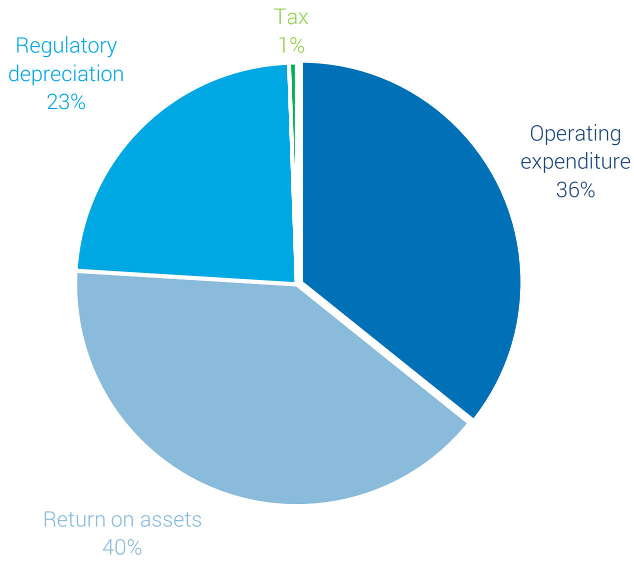
The cost components of regulated revenues

Under SA Water Regulatory Determination 2016 (SAW RD16), the Commission made separate revenue determinations for SA Water's drinking water and sewerage services, applying for the four-year period commencing 1 July 2016. The revenues were determined through a cost-based ("building blocks") approach. The cost components that make up the regulated revenues are:

- operating expenditure, which reflects the day-to-day costs of operating the drinking water and sewerage businesses
- return on the regulated asset base (RAB), which reflects the cost of providing capital to fund SA Water's investments in regulated infrastructure (existing and new assets) and the cost of working capital
- return of capital (regulatory depreciation), which reflects the "wear and tear" cost of using assets, and
- tax allowance, which reflects the company tax that must be paid on profits and comprises around one percent of total costs.

Figure 2 shows the proportion of SA Water's total drinking water and sewerage costs that each cost component comprises.

Figure 2: Breakdown of SA Water’s drinking water and sewerage costs



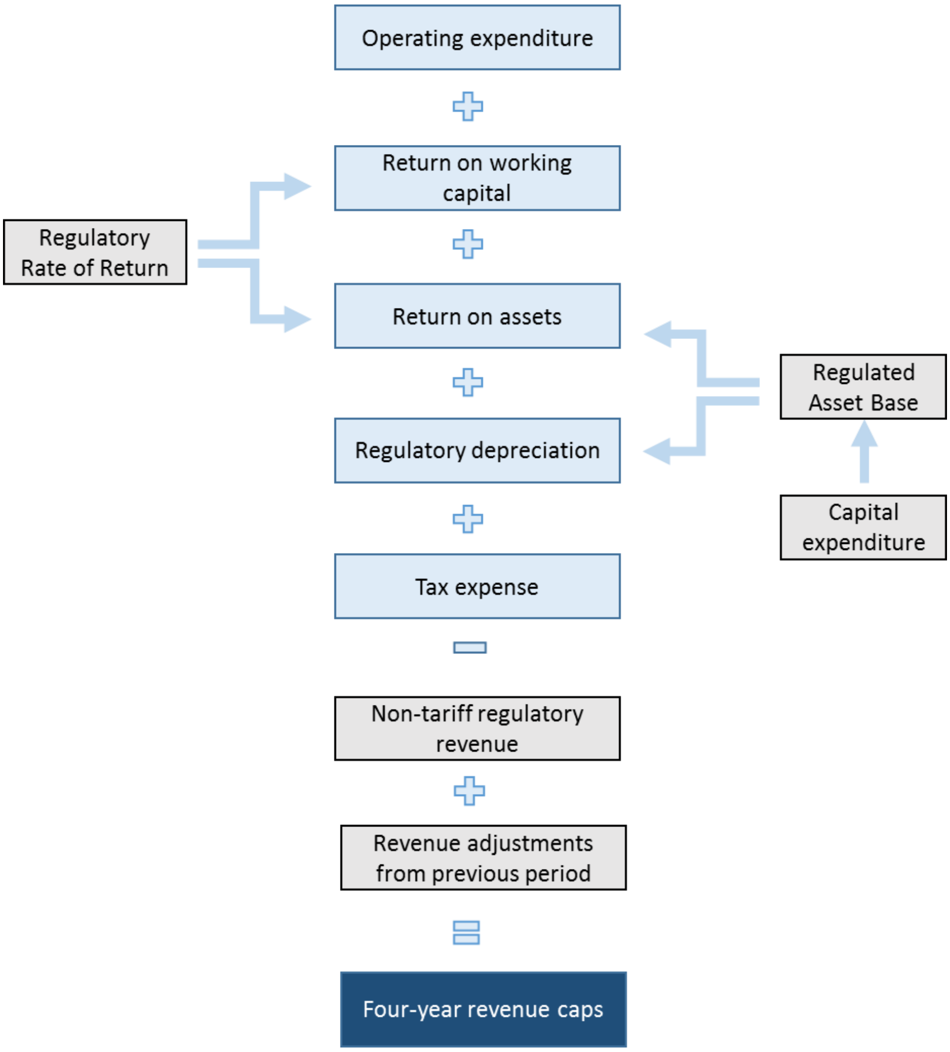
The determination of efficient costs

Consistent with general regulatory practice, the Commission determined the cost components on a forward-looking basis, to reflect efficient costs only. It did not simply pass through SA Water’s expected or actual costs, as that would not provide SA Water with an incentive to operate efficiently. The Commission forecast the costs based on a hypothetical efficient business that has the obligations of SA Water.

To determine the efficient cost components, the Commission reviewed the drivers of those costs, including forecasts of drinking water demand and sewerage connections. The Commission also determined any revenue that funds regulated expenditure that is not sourced from drinking water or sewerage tariffs, such as Government subsidies (which are deducted from the cost building blocks). Finally, it considered the need for any adjustments to future revenue as a consequence of the revenue control formula from the previous regulatory period (eg due to actual water demand being materially different to that forecast[4]). Figure 3 shows how the total revenue cap was derived from those cost building blocks.

[4] This difference is calculated through a “demand variation adjustment mechanism”, which allows an equal sharing between SA Water and its customers of the revenue impacts from any material differences between forecast and actual drinking water and sewerage demand during the SAW RD16 period, subject to a one percent materiality threshold. If actual revenue is above or below forecast revenue by less than one percent at the end of the SAW RD16 period, no demand variation adjustment will be made.

Figure 3: Building block methodology



The Regulated Asset Base

A key input into regulatory depreciation and return on assets is the value of SA Water's RAB. As discussed in Guidance Paper 5 – The efficient cost of funding and using assets, the Commission's approach to calculating the values of SA Water's drinking water and sewerage RAB is to "roll forward" the RAB value from one period to the next, to include prudent and efficient capital expenditure, depreciation, inflation and asset disposals. It does not revalue SA Water's existing RAB as part of each determination, as that could lead to windfall gains or losses to SA Water and its customers.

The South Australian Government has initiated an independent inquiry into the value of SA Water's existing RAB and, should changes to that value arise from the inquiry, the Commission will incorporate any revised RAB value into its revenue determination. The inquiry is scheduled to be completed by 30 June 2019.

SA Water's incentives under the revenue cap approach

Under SAW RD16, the drinking water and sewerage revenue caps apply in aggregate (over the four-year period), as opposed to being annual revenue caps. This provides flexibility to SA Water in designing and altering its tariffs each year.

SA Water's maximum revenues remain fixed during a four-year regulatory period, with the exception that SA Water may apply for adjustments to the maximum revenues at any time, to account for any unforeseen, exogenous events that lead to a material change in the cost of providing drinking water or sewerage services. The Commission assesses the efficient costs of such events, before passing the costs through to maximum revenues, with SA Water then converting those revenues into prices. This approach provides an appropriate allocation of risk between SA Water and customers, in that SA Water should not face the risk of events occurring that cannot be mitigated and lead to material cost increases, but nor should customers face the risk of SA Water incurring inefficient expenditure as a result of those events.

The Commission's approach to setting maximum revenues provides SA Water with an incentive to incur costs that are below those set under the determination, as it is able to retain the benefits of any cost savings until the commencement of the following regulatory period. From that time, cost savings are shared with customers as the new revenue determination will use those lower costs as the starting point for setting future expenditure amounts.

This approach to setting revenues provides flexibility for SA Water to find new ways of delivering services to customers and to adapt to a changing environment. It focuses on customer outcomes, not inputs. In particular, provided SA Water is meeting its regulatory obligations (economic and non-economic obligations), it is encouraged to find ways to become more efficient over time. Each four-year determination represents a checkpoint, whereby SA Water's plans are reviewed together with the outcomes received by customers, to make sure that the price/service offering best promotes consumers' long-term interests.

The Commission intends to apply the same approach to setting maximum revenues in SAW RD20, as applied in SAW RD16.

Regulating prices for excluded services

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.

Excluded services are:[5]

- standard and non-standard connection services (including developer services)
- trade waste services
- non-domestic hauled waste services
- easement extinguishment and encumbrance services
- meter services
- network analysis and audit services
- hydrant and fire plug services and, to an extent,
- recycled water services.

Some excluded services may be ancillary to SA Water's core services. For example, trade waste services operate in conjunction with sewerage services, and require the sewerage network.

Costs of excluded services are generally not included within SA Water's drinking water or sewerage maximum revenues. Instead, they are generally recovered from those who benefit directly.

In some instances, there is a relationship between excluded services and drinking water/sewerage services. For example, the sale of recycled water may be the most cost-effective way of disposing of treated effluent,

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

that is, the most cost-effective way to deliver a sewerage service. As such, the costs of recycled water schemes may be shared between sewerage customers and recycled water customers.

Similarly, trade waste customers pay a sewerage charge (for the primary sewerage function which is subject to a revenue cap) as well as a volumetric trade waste charge (the cost of the excluded service).

Excluded services are a small part of SA Water's regulated business (as discussed in the previous section). However, it is important that fees and charges for excluded services are reflective of efficient costs, so that customers do not pay excessive prices. It is also important for those services and service levels to reflect customers' preferences, which requires evidence from customer engagement.

How are excluded services currently regulated?

SA Water is currently required to adopt the National Water Initiative (NWI) Pricing Principles when setting excluded service charges. [6,] The Commission has also established associated price monitoring and dispute resolution processes.[7,8] The Commission has formally outlined binding principles for dispute resolution relating to excluded services.[9]

SA Water is required to demonstrate annually how the relevant pricing principles for excluded services have been applied, and must maintain a pricing schedule and accompanying pricing policy statement.

A central principle of the NWI pricing principles is that prices that customers pay should be reflective of the efficient cost of providing the relevant service.

The rationale behind the NWI Pricing Principles is that a service can only be provided in the long-run, if the efficient costs incurred in delivering it are fully recovered. The principles encourage a 'user pays' approach to setting prices, which is not dependent on subsidies from third parties, being paid for by the beneficiaries of the service.

The Commission will apply the NWI pricing principles when making a price determination for SA Water, including a determination relating to excluded services.[10]

How has SA Water performed to date?

This section discusses movements in SA Water's drinking water and sewerage revenues, and changes in average bills for residential customers, since 2013. It compares those outcomes to other major Australian water utilities.

It also briefly discusses changes in the price of excluded services since 2013.

Drinking water and sewerage revenues and average bills

The Commission's maximum drinking water and sewerage revenues, established under SAW RD13 and SAW RD16, have fallen in real terms since 1 July 2013. As shown in Figure 4 and Figure 5 below, the reduction in maximum revenues resulting from both determinations has been passed on to consumers at the

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6 ESCOSA, Price Determination: SA Water's water and sewerage retail services: 2016-2020: Price Determination, July 2016, page 16, available at https://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-SAWaterRegulatoryDetermination2016FinalReport-RevenueDetermination.pdf.aspx?Embed=Y

7 See ESCOSA (1), *SA Water's Water and Sewerage Revenues 2013-14 to 2015-16, Final Determination – Statement of reasons*, May 2013, available at https://www.escosa.sa.gov.au/ArticleDocuments/488/130527-SAWater_Water_SewerageRevenu.pdf.aspx?Embed=Y

8 See National Water Initiative Pricing Principles, available at http://www.agriculture.gov.au/SiteCollectionDocuments/water/national-water-initiative-pricing-principles.pdf

9 ESCOSA, Water Industry Rule No.1 – Excluded Retail Services, December 2013, available at https://www.escosa.sa.gov.au/ArticleDocuments/617/131218-WaterIndustryRuleNo1ExcludedRetailServices.pdf.aspx?Embed=Y

10 Refer to clause 3 of the September 2012 Pricing Order, available at https://www.escosa.sa.gov.au/ArticleDocuments/488/120930-Appendix_A-WaterIndustryAct-.pdf.aspx?Embed=Y.

commencement of each regulatory period (1 July 2013 and 1 July 2016).[11] SA Water's drinking water and sewerage costs exhibit a smoother downward trend since 1 July 2013, compared to revenues.

Figure 4 and Figure 5 include the Commission's estimates of SA Water's costs from 1 July 2018 and estimated maximum revenues from 1 July 2020. Those estimates show a continuation of the declining trend in costs and revenues, which is expected to lead to further reductions in SA Water's drinking water and sewerage prices from 1 July 2020. The basis of those estimates is discussed later in this paper.

The figures also show SA Water's actual drinking water and sewerage revenues from 2013-14 to 2017-18, which have generally been below the maximum revenues set under SAW RD13 and SAW RD16. This is because drinking water sales and customer growth have generally been below the amounts forecast.

Figure 4: SA Water's drinking water revenues and costs since 1 July 2013 ($m, $Dec18)

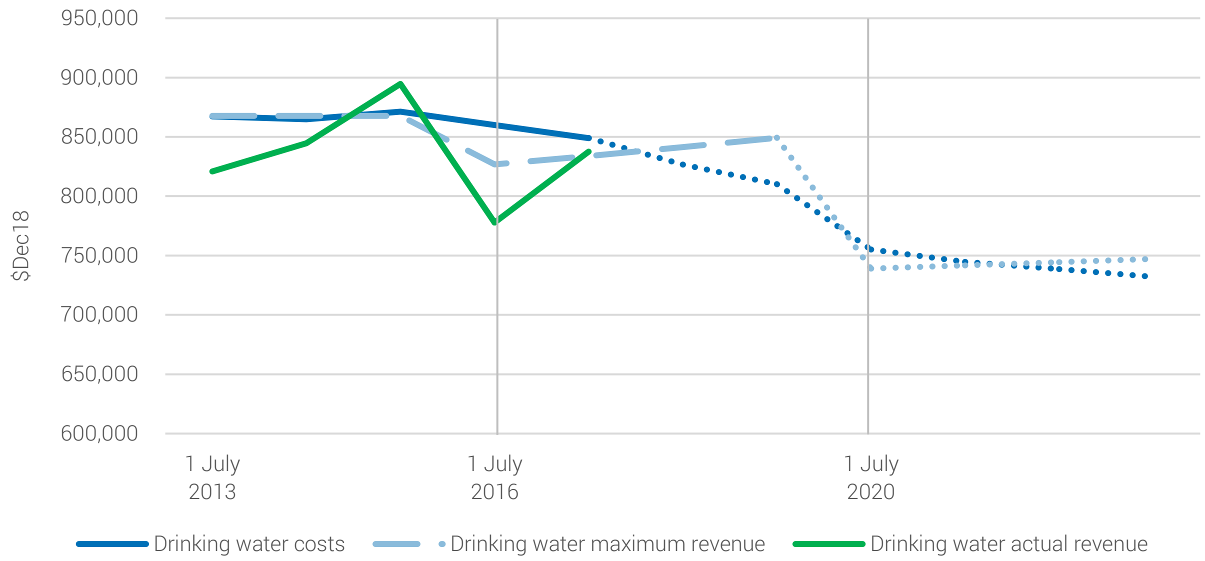
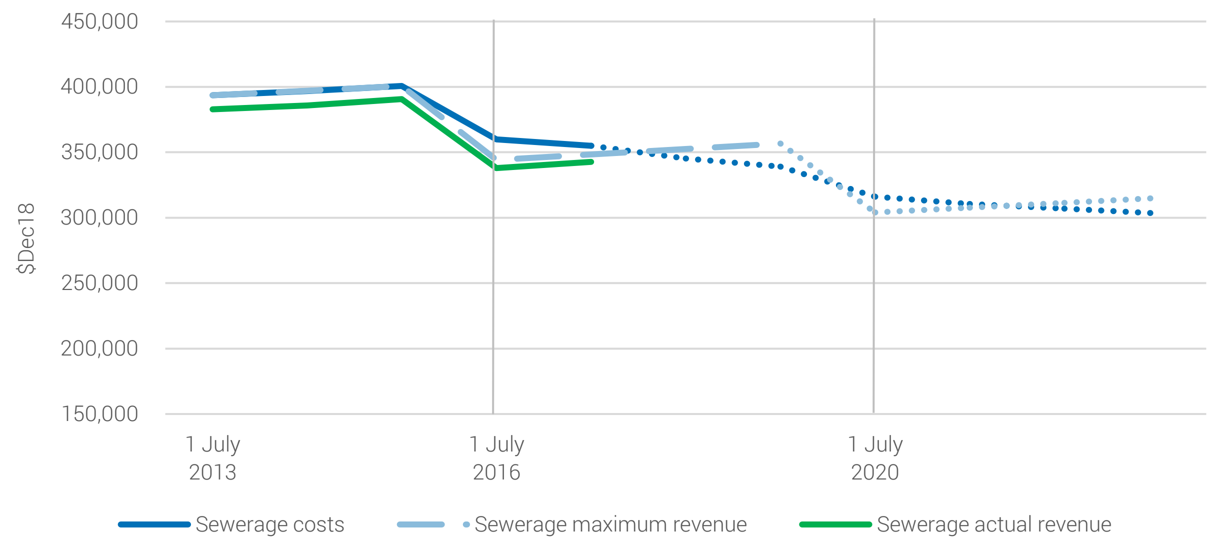


Figure 5: SA Water's sewerage revenues and costs since 1 July 2013 ($m, $Dec18)



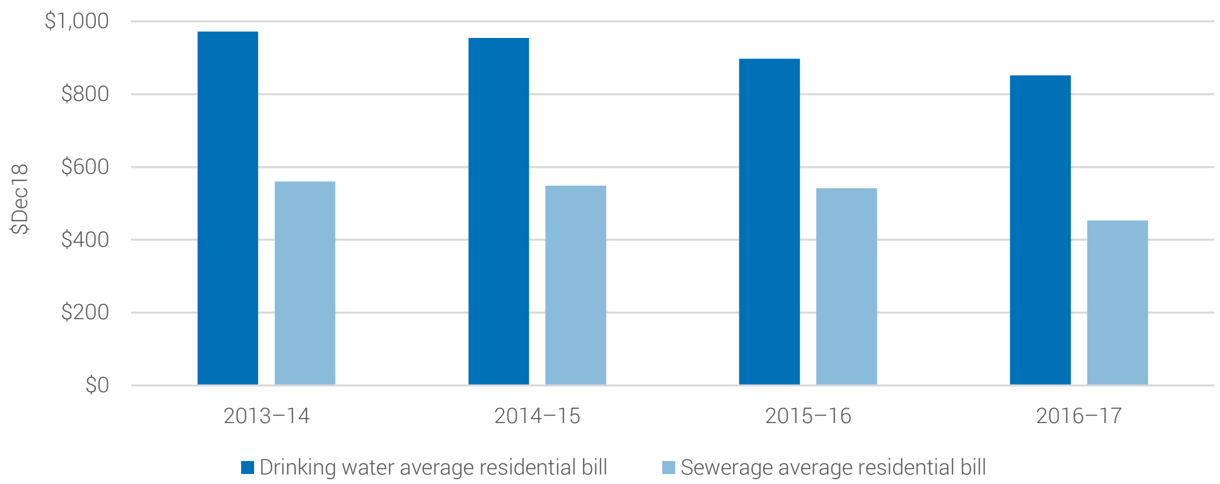
[11] Under SAW RD13, the Commission set average revenue caps, rather than total revenue caps. For drinking water, this was expressed as a maximum dollar per kilolitre of drinking water sold and for sewerage it was expressed as a maximum dollar per sewerage customer. Average revenue caps allow SA Water to recover more or less revenue than forecast, depending on growth in water sales and customer numbers.

In line with the maximum revenues set under SAW RD13 and SAW RD16, SA Water has set prices to deliver revenue reductions at the start of each period, with revenues then increasing by slightly more than the change in CPI for the remaining years of each period.

To illustrate movements in SA Water's prices, Figure 6 shows the real reductions in the annual drinking water and sewerage bills for a typical residential customer (using 200kL of water per annum), as reported by SA Water.[12] Under that measure of prices, SA Water reported the fifth highest residential annual drinking water bill in 2016-17, out of the 14 major Australian water utilities (with more than 100,000 connections). The annual residential sewerage bill reported by SA Water in that year was the lowest of the 14 major utilities.[13]

The National Performance Report does not contain information about changes in drinking water and sewerage prices for business customers.

Figure 6: Typical SA Water residential drinking water and sewerage annual bill ($Dec 18)



Changes in the price of excluded services

Since 1 July 2013, SA Water's prices for excluded services have, in aggregate, increased in line with inflation. There was, however, a real reduction in overall excluded services prices on 1 July 2016, reflecting the general reduction in drinking water and sewerage prices, established under SAW RD16.[14]

Within the excluded services, prices for individual services have not tracked identically, with some prices falling while others have risen marginally above inflation.

What needs to be considered for SAW RD20?

The Commission proposes to retain the existing cost-based methodology for setting SA Water's drinking water and sewerage revenues. All stakeholders will be able to provide input into the Commission's review of SA Water's proposed efficient costs of delivering those services, prior to the Commission making its determination. This will include eliciting views from the Consumer Experts Panel and through the direct testing of those proposals by the Customer Negotiation Committee. The Commission also proposes to retain the existing pricing principles approach for excluded services.

12 This information is available in the National Performance Report: Urban Water Utilities, published by the Bureau of Meteorology, available at http://www.bom.gov.au/water/npr/.

13 Bureau of Meteorology, *National Performance Report: Urban Water Utilities 2016-17*, page 28, available at http://www.bom.gov.au/water/npr/docs/2016-17/national_performance_report_2016_17_urban_water_utilities_lowRes_update.pdf. The data is also available in spreadsheet form at http://www.bom.gov.au/water/npr/docs/2016-17/theCompleteDataset-17.xlsx.

14 This information is published by SA Water on its website each year. Information about 2018-19 excluded services prices is available at https://www.sawater.com.au/__data/assets/pdf_file/0007/263248/2018-19-Pricing-Schedule_Fees-and-Charges.pdf.

The review of efficient drinking water and sewerage costs

The Commission expects SA Water to give its stakeholders the opportunity to influence its draft regulatory business proposal, before submitting it to the Commission. It should explain why those proposals reflect the lowest sustainable cost of providing drinking water and sewerage services, consistent with all relevant regulatory obligations and customers' preferences.

The Customer Negotiation Committee is responsible for testing those proposals and seeking to reach agreement with SA Water about the maximum revenues for drinking water and sewerage that should apply under SAW RD20. It is, however, not required to reach agreement.

While all aspects of SA Water's proposal will be open to scrutiny by the Customer Negotiation Committee, not all aspects of SA Water's proposal will be open to negotiation. As explained in Guidance Paper 4 – Prudent and efficient expenditure, the policy and regulatory requirements that SA Water must comply with are not subject to challenge by the Customer Negotiation Committee. However, the Customer Negotiation Committee may challenge SA Water to ensure it is meeting its policy and regulatory requirements in the most efficient way.

The Commission's Guidance Papers provide the principles and methodologies that will guide SA Water's regulatory business plan and the negotiation process. The Guidance Papers are non-binding, although any negotiated position that meets the Commission's guidance will receive significant weight in the Commission's determination.

The Commission expects SA Water to be able to demonstrate to stakeholders and the Customer Negotiation Committee that its proposals have had regard to the following factors:

- the statutory factors that the Commission must have regard to, particularly the need to protect the long-term interest of consumers' with respect to the price, quality and reliability of essential services
- the intended outcome of SAW RD20, which is to 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
- the impact on the financial viability of SA Water, which is a matter that the Commission must have regard to in making SAW RD20

How will the maximum revenues compensate SA Water for risk?

A critical feature of economic regulation is the manner in which risk is allocated between the provider of an essential service and consumers of that service.

There are various types of risks that SA Water and its customers face and the Commission has identified and addressed those risks where relevant in its regulatory approach. Table 1 shows the relevant risks and comments on how those risks are allocated between SA Water and its customers, based on the current regulatory framework. It shows that risks to SA Water are generally considered by the Commission to be low. The Commission acknowledges the subjectivity of the assessment, but it recognises that the nature of SA Water's monopoly business, together with the design of the cost-based revenue caps (with cost pass through arrangements), gives SA Water certainty that it will be able to recover its efficient costs in the long term. This has important implications for the Commission's regulatory determination as the Commission explicitly recognises risk in SA Water's regulatory rate of return.

Discussion of how the regulatory rate of return reflects risk is discussed in Guidance Paper 5 – The cost of funding and using assets.

Table 1: How risks are shared between SA Water and its customers

Type of risk	What is the risk?	How does the risk apply to customers?	How can SA Water mitigate this risk?
Demand risk	The risk that revenue is affected because demand for water or sewerage differs from that forecast. This risk is significant for drinking water services because SA Water's drinking water costs are largely fixed, while its drinking water revenues are largely variable. Demand risk is lower for sewerage services, where revenues are largely fixed and demand is more predictable. SA Water is subject to a revenue cap rather than price cap, so it is able to adjust prices to compensate for demand risk (subject to the presence of a demand variation adjustment mechanism).	Demand risk is shared between SA Water and its customers, through the operation of the revenue caps with a demand variation adjustment mechanism. Drinking water prices may increase or decrease each year, should drinking water demand differ from that forecast.	SA Water does not face significant long-term demand risk under revenue cap regulation.
Input price risk	The risk that the cost of inputs to the provision of water and sewerage services, such as labour or electricity, changes more than is forecast and allowed for under the revenue determination. The presence of a cost pass through mechanism abates this risk to SA Water.	Customers face the majority of input price risk, as SA Water is able to recover its efficient costs through revenue caps and, in the event of an unexpected material input price increase, may seek a cost pass through during a regulatory period.	SA Water may be able to mitigate input price risk through hedging instruments (eg electricity derivatives). SA Water may still face input price risk where the cost impacts cannot be mitigated and are not sufficient to trigger a cost pass through. If SA Water cannot influence the input price or cannot mitigate the price risk, it may incur costs that are not recovered through regulated revenues.
Cost volume risk	The risk of uncertainty about the quantity of inputs required to deliver services, for example, more chemicals required to treat sewage, or more labour required to replace pipes. The presence of a cost pass through mechanism abates this risk	Customers face the majority of cost volume risk, as SA Water is able to recover its efficient costs through revenue caps and, in the event of an unexpected material change in input volumes, may seek a cost pass through during a regulatory period.	SA Water may still face cost volume risk where the cost impacts are not sufficient to trigger a cost pass through.

Type of risk	What is the risk?	How does the risk apply to customers?	How can SA Water mitigate this risk?
Supplier risk	The risk that suppliers or contractors fail to deliver agreed services, which may cause a search for replacement suppliers. This type of business risk rests with SA Water and is not addressed through the regulatory framework.	Customers should not face the risk of supplier failure, which is able to be mitigated by SA Water.	SA Water can mitigate this risk through its contractual arrangements and effective contractor management.
Inflation risk	The risk of actual inflation differing from forecast inflation. The Commission's approach to setting revenue in real terms abates this risk, although there is some inflation risk inherent in the calculation of the regulatory rate of return (through deflating nominal returns to real returns).	Customers largely face inflation risk as SA Water's prices are adjusted each year for actual inflation, which is passed through to customers.	There is some residual risk that SA Water faces under the regulatory rate of return calculation, should actual inflation depart from the forecast inflation incorporated in the rate of return.
Competition risk	The risk that a competitive supplier of water or sewerage emerges to take customers from SA Water. SA Water does not face significant competition risk as it is largely a monopoly business. To the extent that competition does exist, any loss of revenue is addressed when setting maximum revenues, as those revenues reflect efficient costs, which are largely fixed and would not materially change due to loss of customers.	Should SA Water lose significant revenue to a competitor, it will continue to be able to recover its fixed costs from remaining customers under the revenue cap calculation. This transfers competition risk to customers.	As a monopoly supplier of drinking water and sewerage services, there is little competition risk faced by SA Water. SA Water faces some competition under the third party access regime. However, the pricing approach established under that regime protects SA Water's existing customers from the effects of any lost revenue to competitors, through its "retail minus avoidable cost" approach.
Stranding risk	The risk that assets owned by SA Water become obsolete earlier than expected. The Commission's approach to "rolling forward" the existing regulated asset value abates this risk.	Stranding risk is passed on to customers by allowing SA Water to recover past efficient capital expenditure through prices, even if the asset becomes obsolete (eg through technological change).	SA Water would only face stranding risk if there were political/regulatory changes that led to a change in the value of its existing regulated assets (see political/regulatory risk below).

Type of risk	What is the risk?	How does the risk apply to customers?	How can SA Water mitigate this risk?
Political/regulatory risk	The risk that the services or income stream for SA Water are unfavourably impacted by regulatory or political decisions. The presence of independent economic regulation of SA Water is intended to address this risk.	Independent economic regulation aims to ensure that customers pay prices that reflect efficient costs only. The Commission's approach aims to provide stability and certainty to SA Water and customers.	SA Water has reasonable certainty of recovering its efficient costs, although information asymmetry/forecast error may create some risk of its efficient costs not being recovered. SA Water can manage some of that risk through effective cost management practices.
Other business risk	Unforeseen events such as natural disasters, fraud or terrorism. The presence of a cost pass through mechanism abates this risk.	Customers may face the risk of disrupted services and the risk of a material cost increase, which could be passed through to customers' prices if those costs are efficient and if the event was unable to be mitigated by SA Water.	SA Water can mitigate these risks through its operating practices, including its security measures, and insurance.
Refinancing risk	The risk that the debt portfolio is not easily refinanced, or unable to be refinanced. The Commission's approach to setting a trailing average cost of debt (discussed in Guidance Paper 5 – The cost of funding and using assets) abates this risk.	The Commission's approach to setting the regulatory rate of return aims to ensure that customers only pay for efficient financing costs. If financing costs increase due to illiquid debt markets, the maximum revenues may increase or SA Water may seek a cost pass through if the impacts are material and cannot be mitigated by SA Water.	SA Water can manage this risk by refinancing a proportion of its debt each year. This reduces the risk of there being insufficient liquidity in debt markets at any point in time. If it is unable to refinance debt under that strategy, equity holders may face the risk. SA Water's refinancing risk is also abated via Government ownership, although this is irrelevant to the determination of SA Water's revenues.
Interest rate reset risk	The allowed cost of finance does not match the actual cost of finance over the regulatory period. The Commission's approach to setting a trailing average cost of debt abates this risk.	Should actual costs of finance depart from forecast costs during a regulatory period, customers may face higher prices in the next regulatory period when the regulatory rate of return is updated. SA Water may also seek a cost pass through during a regulatory period if the interest rate increase is material and cannot be mitigated.	SA Water can manage this risk by refinancing a proportion of its debt each year.

Type of risk	What is the risk?	How does the risk apply to customers?	How can SA Water mitigate this risk?
Illiquidity risk	The risk that SA Water's debt or equity holders are unable to liquidate their positions in SA Water.	Illiquid financial markets may translate into increased costs of debt or equity, which would be reflected in the regulatory rate of return. Customers would face that risk in that event.	SA Water may not be able to influence liquidity of financial markets, but would be compensated through the regulatory rate of return (debt premium or market risk premium) if illiquidity led to higher efficient financing costs.
Default risk	The risk of cash not being available to service short-term obligations.	The maximum revenue seeks to ensure that there is sufficient cash flow for SA Water to operate its regulated business. This includes allowing for working capital and providing a return on working capital. Prices paid by customers reflect those efficient costs.	SA Water can mitigate this risk through prudent financial management.
Financial counterparty risk	The risk that third parties fail to honour their obligations under arrangements entered into to manage risk, for example, insurance, hedging, currency swaps.	This risk is low during normal economic conditions. In the unlikely event that this risk increases (eg Global Financial Crisis), the impact would be reflected through a higher regulatory rate of return. Should an event occur during a regulatory period, SA Water may request a cost pass through if the impact was material and could not be mitigated.	SA Water can mitigate this risk through prudent financial management.

Drinking water and sewerage revenues from 1 July 2020

To assist stakeholders, the Consumer Experts Panel and the Customer Negotiating Committee to better understand the price-quality-reliability trade-offs which will underpin the final outcomes of the SAW RD20 process, the Commission has estimated, as a range, the change in SA Water's drinking water and sewerage revenues that would result from updating existing methodologies and inputs for known changes in costs. The estimates form a starting point for the determination process and are intended to demonstrate that, if the SAW RD16 methodologies were updated for known cost changes, SA Water's drinking water and sewerage revenues would decrease from 1 July 2020, relative to the maximum revenues that will apply in 2019-20, determined under SAW RD16.

These estimates do not seek to predict the potential outcomes of SAW RD20; the final outcomes will be a product of a broad range of considerations, options and debates between SA Water, its stakeholders and the Commission.

In particular, the non-binding estimates do not reflect:

- the service level and expenditure plans that SA Water is developing for the SAW RD20 period (noting that the Commission expects SA Water to clearly explain and justify any changes in its proposed costs throughout the process)
- possible changes in the regulatory rate of return (both parameters and methodology), which may have a significant impact on SA Water's revenues, and
- representations made by stakeholders (including the Consumer Experts Panel), the outcomes of the Negotiation Forum and the Commission's ultimate determination in 2020.

In addition, and separate to the SAW RD20 process, the South Australian Government has commissioned an inquiry into SA Water's drinking water prices, which may lead to a change in the value of SA Water's drinking water asset base. The Commission has not taken into account the impact of any such change in developing its non-binding estimates.

The Commission's "starting point" estimates suggest that – all else being equal and using current methodologies and known data – drinking water and sewerage revenues could decrease, in real terms, by between 9 percent and 13 percent from 1 July 2020 if there were no changes made through the determination process. This would represent a revenue decrease ranging from approximately 7 percent to 11 percent in nominal terms, assuming inflation of 2 percent per annum. The Commission notes that it would expect that these figures will change through the process where proposals and options raised are justified and accepted by stakeholders and the Commission.

Confirming the approach for regulating prices of excluded services

The Commission is proposing to maintain the current approach to regulating excluded services by requiring SA Water to apply specified Pricing Principles to facilitate:

- economically efficient and sustainable use of infrastructure and resources,
- the recovery of sufficient revenue to enable the long-term provision of the service,
- the principle of beneficiary-pays, with accompanying pricing transparency.

This approach provides flexibility to SA Water in setting excluded services charges to reflect the diverse nature of those services and customer requirements. It also recognises that it is a small component of SA Water's regulated business. Specifically, the principles that are proposed to apply, consistent with the NWI Pricing Principles, are:

- efficient costs relating to an excluded service are recovered from the beneficiaries of that service
- prices should recover efficient, full direct costs[15] – with system-wide incremental costs (adjusted for avoided costs and externalities) as the lower limit, and the lesser of stand-alone costs and willingness to pay (WTP) as the upper limit
- any full cost recovery gap should be recovered with reference to all beneficiaries of the avoided costs and externalities
- prices should be transparent, understandable to users and published to assist efficient choices
- where prices have to change to achieve full cost recovery, prices should reflect a strategy of 'gradualism' to allow consumer education and time for the community to adapt

[15] In this context, direct costs include any joint/common costs that a scheme imposes, as well as separable capital, operating and administrative costs. This definition of direct costs does not include externalities and avoided costs.

- the cost recovered should not exceed the efficient operational, maintenance and administrative costs, externalities, taxes or tax equivalents, provision for the cost of asset consumption and the cost of capital, and,
- where relevant, pricing structures should be able to reflect differentiation in the quality or reliability of the service.

Consistent with the NWI Pricing Principles, the Commission proposes separate principles for recycled water services. For those services, SA Water should ensure that there is an appropriate allocation of costs of providing those services between recycled water customers and sewerage customers, where a recycled water scheme:

- Is a prudent and efficient means of addressing environmental (sewerage discharge) obligations, and
- Forms part of a least-cost mix of diversified water sources needed to achieve required security of supply, or
- Is driven by the need to trial new technologies, with the aim of achieving more efficient ways to deliver a secure supply of water.

The pricing principles above provide a basis for such cost allocation. SA Water's proposed regulatory business plan should demonstrate that its costs have been allocated appropriately between drinking water, sewerage and excluded services, consistent with the pricing principles. It expects SA Water to demonstrate that to the Customer Negotiation Committee.

The Commission will monitor SA Water's application of the pricing principles to excluded services, together with the prices and service levels provided. The monitoring regime carries the ability for the Commission to impose a different form of regulation should there be evidence that good customer outcomes are not being delivered by SA Water and an alternative regulatory approach is required. It is appropriate to maintain this approach, given that provision of SA Water's excluded services is a monopoly service.

What customer engagement should occur?

The Commission expects SA Water to engage with its customers on the provision of new and existing excluded services, and service levels.

This should involve engaging with a representative sample of its customers of excluded services to determine the appropriate service/price balance. Services provided should align with customers' preferences, expectations and willingness to pay for those services.

Ideally, evidence from customer engagement to support this negotiation of excluded service provision would address:

- the type of excluded services SA Water's customers want, including those SA Water already provides (eg recycled water, trade waste services, and connections), and others it may provide in the future (eg recreational access to reservoirs).
- what aspects of those services matter most to its customers (eg timeliness, quality, availability).
- information about the efficient cost of providing those services and customers' preferences for the price/service offering.
- customer preferences for transitioning any excluded service charges towards the full recovery of efficient costs. For example, where a particular charge is below the efficient cost of the service, SA Water should discuss with customers an appropriate timeframe for transitioning to cost-reflective charges.

SA Water should present that information in its regulated business plan. As excluded services is a small component of SA Water's regulated business, the Commission does not expect the Negotiation Forum to discuss those services, apart from considering the basis of cost allocation between drinking water, sewerage and excluded services. Instead, the Forum should focus on drinking water and sewerage charges, which impact many more customers and have a greater impact on SA Water's revenues.

Appendix 1: Contributions from the South Australian Government to SA Water

A summary of the contributions made by the South Australian Government to SA Water, for the provision of drinking water and sewerage services, is set out in Table 2 below.

Table 2: South Australian Government contributions to SA Water ($000s)[16]

Contribution	2016-17	2017-18	2018-19	2019-20
State-wide Pricing Facility				
Drinking water retail services	67 416	67 416	67 416	67 416
Sewerage retail services	40 163	40 163	40 163	40 163
Government Radio Network Services	560	574	588	603
Emergency Management Services	559	573	587	602
Save the River Murray Levy Administration Services	60	60	60	60
Total	108 758	108 786	108 814	108 844

Further contribution for properties with charitable status

The South Australian Government makes a further contribution for provision of water and sewerage rate concessions for properties with charitable status, in the order of $18 million per annum.[17]

SA Water makes some contributions to the South Australian Government

The current Ministerial Direction also requires SA Water to makes annual contributions to the South Australian Government for:

- its water planning and management activities (approximately $18 million per annum), and
- land valuation services (approximately $5 million per annum).

Those costs are recovered through SA Water's regulated revenues.

[16] Ministerial Direction to SA Water, included in Appendix 3 of SAW RD16 Final Framework and Approach, see https://www.escosa.sa.gov.au/ArticleDocuments/440/20141121-Water-SAWaterPriceDetermination_2016-202.pdf.aspx?Embed=Y

[17] The *Water Industry Act 2012* (s 25) requires SA Water to comply with a scheme for specified exemptions, which is a continuation of the arrangements made under the *Waterworks Act 1932* and *Sewerage Act 1929* for the period 1 July 1997 to 30 June 1998.