

# WATER PRICING

*Issues Paper No. 2*

*Inquiry into the reform of SA Water's drinking water and sewerage prices*

August 2013



## REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (**the Commission**) invites written submissions from all members of the community in relation to the issues raised in this Issues Paper. Written comments should be provided by **5.00 p.m., Friday 8 November 2013**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is Commission's policy to make all submissions publicly available via its website ([www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to exhibit any submission based on their length or content (for example containing material that is defamatory, offensive or in breach of any law).

Responses to this paper should be directed to:

Water Pricing – Inquiry into the reform of SA Water's drinking water and sewerage prices

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The Essential Services Commission of South Australia is the independent economic regulator of the electricity, gas, ports, rail and water industries in South Australia. The Commission's primary objective is the *protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services*. For more information, please visit [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au).

## THE ISSUE

SA Water provides drinking water to 1.56 million South Australians – around 95 per cent of the State’s population. It provides this service to residential (household) and non-residential (includes commercial and industrial) customers. While 90 per cent of its customers are residential, they consume only about 65 per cent of the total drinking water supplied. SA Water’s customers are landowners, who may not be the consumers of drinking water.

As part of its inquiry into the reform of SA Water’s drinking water and sewerage prices, the Essential Services Commission of South Australia (‘the Commission’) is reviewing SA Water’s drinking water tariffs to see if there is a better, more efficient, way of charging customers.

Details of the full scope of the Commission’s Inquiry can be found [here](#).

## THE CURRENT APPROACH

### Statewide pricing policy

Drinking water prices are currently set under a statewide pricing policy, which means that prices are the same across all metropolitan and regional areas in the SA Water network. There is a view that this is the fairest way of spreading the cost of providing and maintaining basic water facilities across the community.<sup>1</sup>

There are some exceptions to this policy, such as customers in certain railway towns in northern South Australia who pay higher prices for drinking water.

### Fixed and variable prices

SA Water has two types of charge – a fixed (supply) charge and a variable (usage) charge.

For residential customers, there are three price levels (or tiers) based on consumption – that is, the higher the usage, the higher the price of

water (see Table 1). These pricing tiers are known as ‘inclining block tariffs’.

**Table 1: SA Water’s 2013/14 residential drinking water tariffs**

WATER TARIFFS	WATER USE PRICE	QUARTERLY USAGE* THRESHOLD	ANNUAL USAGE* THRESHOLD
Tier	\$ per kilolitre		
Tariff Block 1	\$2.26 per kL	30 kL	120 kL
Tariff Block 2	\$3.23 per kL	30 to 130 kL	120 to 520 kL
Tariff Block 3	\$3.49 per kL	Above 130kL	Above 520kL

\* These tariffs are calculated and applied daily.

Inclining block tariffs are used by SA Water and the Government to ‘manage the impact on customers by smoothing the transition to higher water prices over time’.<sup>2</sup> The lower priced first-tier is justified for social equity reasons, while the higher priced third-tier is designed ‘to retain conservation signals for residential customers using higher levels of water’.<sup>3</sup>

For non-residential (includes commercial and industrial) customers there is a single usage price, which is currently set at \$3.23 per kilolitre for 2013/14.

All customers pay a supply charge, even if no water is consumed. The fixed supply charge for 2013/14 is \$274.80 per annum; however, some commercial customers pay more, depending on their property values.

Some customers also pay less. For example:

- ▲ multiple residential properties that have only one water meter, such as those on strata or community titles, are not charged by SA Water for the highest priced tier
- ▲ commercial car parking properties receive a 50 per cent reduction in the minimum supply charge
- ▲ lower water rates apply for community properties such as memorial gardens, children’s

<sup>1</sup> SA Water (2013), *In Detail: 2013-14 Water and Sewerage Pricing Questions and Answers*, available at: [http://www.sawater.com.au/nr/rdonlyres/cdace7f4-cec3-41a5-b9f7-5c723050bec7/0/pricing\\_faqs\\_2013.pdf](http://www.sawater.com.au/nr/rdonlyres/cdace7f4-cec3-41a5-b9f7-5c723050bec7/0/pricing_faqs_2013.pdf).

<sup>2</sup> SA Government, *Water for Good*, June 2009, p144, available at:

<http://www.environment.sa.gov.au/about-us/plans>

<sup>3</sup> SA Government, *Water for Good*, June 2009, p144.

services centres, swimming pools<sup>4</sup> and other community or charity facilities.

However, low-income customers fall into a different category, because the concessions they receive are paid by the Government as rebates.

An extract from SA Water's website, noting its prices and general principles, is provided in Appendix 1.

### **Charging landowners**

SA Water currently only bills landowners for drinking water, even if they do not live on the property. Tenants are not directly billed by SA Water.

A supply charge is also incurred even if there is no connection to a passing water main (for example, the land is vacant). This practice, referred to as 'rating on abuttal', is also addressed in Issues Paper 3 – Sewerage, Trade Waste and Property-based Charging, accessible [here](#).

The view in support of this, is that water is available to customers should they, or future owners, ever choose to connect. Those in support of this view suggest that the availability of this service contributes to the value of both vacant and developed properties.<sup>5</sup>

## **POSSIBLE APPROACHES AND OPPORTUNITIES FOR CHANGE**

The Commission seeks the views of interested parties on the issues and the various reform options presented below. Comments on any other matters or reform options are also welcome.

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<sup>4</sup> In particular, swimming pools are charged \$0.30 per kilolitre for water use up to 13 fills per year, which is less than 10% of the tariff faced by the majority of water customers. Thereafter, the second tier applies.

<sup>5</sup> SA Water (2013), *In Detail: 2013-14 Water and Sewerage Pricing Questions and Answers*, p8, available at:

[http://www.sawater.com.au/nr/rdonlyres/cdace7f4-cec3-41a5-b9f7-5c723050bec7/0/pricing\\_faq\\_2013.pdf](http://www.sawater.com.au/nr/rdonlyres/cdace7f4-cec3-41a5-b9f7-5c723050bec7/0/pricing_faq_2013.pdf).

### **Statewide pricing of water**

As part of this Inquiry, the Commission is reviewing alternative approaches to the current statewide pricing policy. It is examining whether there are major differences in the cost of supplying drinking water to different regions of South Australia, and whether economic efficiency could be improved through pricing based on location – that is, regional pricing.

#### **Option 1: Retain the current statewide pricing arrangements**

In terms of efficiency, the main benefit of retaining the statewide pricing policy is that it would avoid the expense associated with implementing an alternative, region-based approach – costs such as IT upgrades and changes to the billing system. It would also avoid any billing disruption to customers.

However, under statewide pricing, prices do not always align well with the cost of supplying different regions. Some customers are actually paying more than the cost of delivering the service, while others are paying less.

This means that both usage and infrastructure investment decisions are not necessarily based on the true cost of supply. The degree to which customers might respond positively or negatively to pricing based on location will be explored as part of this Inquiry.

#### **Option 2: Set region-based drinking water prices**

Under a region-based approach, prices would be based on the cost of delivering services in, or to, a particular area.

They could be set separately for the Adelaide metropolitan area and other 'zones' with shared infrastructure. The efficiency benefit of such an approach is that prices become more reflective of costs, and this is more likely to promote better consumption decisions by customers. It can also help guide decisions about location for users – particularly industrial – who may need to use large amounts of water.

Transitioning to region-based pricing could have an impact on prices paid in some communities and this needs careful consideration. The Commission will consider how a direct subsidy could be provided in such circumstances, where there was a need for community support.

### **Fixed and variable prices**

Options for reforming the fixed and variable components of drinking water prices are also under investigation. There may be alternatives to the way in which usage charges are currently set, particularly whether the continued use of inclining block tariffs remains.

### **Volumetric consumption charges**

The South Australian Government's *Water for Good* long-term plan recognises 'that cost-reflective water use prices provide the most economically efficient water use signal to customers'.<sup>6</sup> It recommends that residential and non-residential prices continue to gradually transition towards what is known as the estimated Long Run Marginal Cost (LRMC).<sup>7</sup>

The Commission believes that scarcity pricing – whereby consumers incur a volumetric charge that varies based on the availability of water (e.g. the volume of water in storage) – should also be considered as part of this Inquiry as a means of promoting short-term cost reflectivity in prices and possibly reducing the need for water restrictions.

#### **Option 1: Retain the current inclining block tariff approach to water usage pricing.**

The use of inclining block usage charges is generally justified on the grounds that the first block provides a minimum level of water for critical human needs and promotes social equity, while the highest block acts as a deterrent to excessive consumption.

However, it is not clear whether this structure delivers the desired outcomes efficiently. It could be argued that it is a blunt instrument in delivering social equity benefits, because all customers receive the benefit of the first tier regardless of their means. Customers with multiple properties obtain the benefit on each and every property that they own.

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<sup>6</sup> SA Government, *Water for Good*, June 2009, p145.

<sup>7</sup> LRMC measures the incremental operating and capital costs associated with meeting additional future demand. It is a cost-reflective approach that encourages consumers to make better consumption decisions.

#### **Option 2: Move to a long-run marginal cost (LRMC) of supply for water consumption.**

As noted above, an LRMC approach to pricing is considered to be the most appropriate and cost-reflective, because it encourages customers to make better consumption decisions.

However, it may result in some customers paying less and others paying more than at present. The move to a region-based pricing system would be founded upon a regional-based LRMC.

The Commission would need to consider efficient transitional processes (possibly including direct funding) to smooth the impact to affected customers.

#### **Option 3: Set prices to reflect the scarcity of water or other significant short term influences.**

Scarcity pricing has the potential to reflect the value of the resource in times of high demand (or low supply), as distinct from the capital costs of the infrastructure, or the operating costs associated with its delivery. This approach could include allowing prices to fluctuate to reflect the short-term demand for water in dry years or in times of drought.

The major benefit would be that customers would receive (cost-reflective) pricing signals and have the opportunity to modify their consumption behaviour. This could be an alternative to across-the-board water restrictions.

However, in times of scarcity, the price of water could well be excessively high for some consumers and hurt those on low incomes in particular. This could be addressed by using extra revenue that would result from the higher prices charged could be used to more efficiently target and help those most in need.

### **Fixed charges**

In principle, the fixed supply charge reflects the operating and capital infrastructure investment costs that cannot be recovered through usage charges. The Inquiry is considering whether fixed charges are appropriate, given the substantial differences between different classes of customer.

### *Option 1: Retain the current supply-charge pricing arrangements*

Commercial customers pay a supply charge based on property values, while residential and non-residential customers pay a supply charge fixed at the minimum level, regardless of property value.

This means that prices do not necessarily align with the cost of supply and, therefore, do not satisfy the objective of being 'economically efficient'.

### *Option 2: Supply charges based on the number and size of meters.*

In New South Wales, Western Australia and the Northern Territory, supply charges are based on different sized meters delivering the different flow rates required by some types of customers. Setting supply charges to reflect the size of a customer's meter more accurately reflects high-use customers' demand on the system. Under this approach, a residential customer would pay much less than an industrial customer who typically requires far more capacity in the water system.

### ***Vacant properties (rating on abuttal)***

The practice of rating on abuttal is common amongst water utilities in other states, although it is not used by other infrastructure service providers (e.g. gas and electricity) in South Australia. The Commission will review whether or not the current rating on abuttal arrangements should be retained.

### *Option 1: Retain the current arrangements.*

The major benefit to retaining the current arrangements is that it avoids the need for changes and costs to modify SA Water's systems and processes. It is also justified by those who believe that access to a water main, even if not connected, provides a benefit to customers through increased land values - which customers should pay for.

### *Option 2: Only charge customers who directly connect to the drinking water network or avail themselves of SA Water's services.*

To the extent that customers already pay for the ability to access a water main through land prices, an additional rating on abuttal charge may not reflect any additional benefit to customers and may not be economically efficient. One

option is to therefore remove the rating on abuttal charge and rely on land values to reflect the value of available water and sewer infrastructure.

However, it would also mean that the charges currently paid by rating on abuttal customers would need to be transferred to SA Water's remaining customers.

### ***Subsidised customers***

As a result of Government policies, certain customer groups receive subsidised prices for drinking water, either by:

- ▲ taxpayer-funded lower prices (government makes a payment to SA Water) – e.g. community swimming pool tariffs
- ▲ cross-subsidised lower prices (from higher paying customers) – e.g. commercial customers with high property values pay high supply charges, cross-subsidising lower supply charges for other customers.

To the extent that there is a clearly defined policy objective for maintaining subsidies and cross-subsidies, the Commission needs to consider whether this can be achieved through more efficient and transparent means.

### *Option 1: Retain the current arrangements.*

Retaining the current approach would avoid the need for changes to SA Water's systems or current subsidy arrangements. However, the distorted price signals sent to subsidised customers, which do not reflect the true value of the water delivered, are likely to be contributing to inefficient consumption behaviours.

### *Option 2: Move to more cost-reflective pricing by customer types, with direct subsidy payments where appropriate.*

Moving to a more cost-reflective pricing arrangement is likely to lead to better informed consumption behaviours and investment decisions by customers, thereby promoting greater economic efficiency.

However, consideration would need to be given to the potential implications this would have on customers who currently benefit from subsidies and cross-subsidising. This may result in Government providing further indirect subsidies to low income customers.

### **Water product quality**

The quality of the drinking water service that SA Water provides can vary because of the needs, or location, of some customers. For example, those with critical needs, such as hospitals, require a higher level of reliability of service; and in some locations, the water may be of lower quality because of its source.

The Inquiry is examining the benefits of varying prices to reflect different levels of service quality.

#### **Option 1: Retain the current arrangements.**

Drinking water prices are generally the same around South Australia, regardless of the level of service reliability and quality of drinking water provided.

While this may be seen as an equitable approach, and relatively simple to administer, it may not be helping to achieve economic efficiency, especially if there are different costs associated with providing different levels of service in different locations.

#### **Option 2: Move to pricing that differentiates service quality**

Prices that vary by service quality can lead to better consumption decisions by customers. However, where there are several different categories of quality, it can involve a more complex set of prices.

There may be other policy objectives that drive the need for subsidised pricing for some customers who receive different service quality. If that is the case, alternative ways to achieve the same objectives need to be considered.

## **QUESTIONS**

The Commission seeks the views of interested stakeholders on the issues and options raised above and, in particular, in relation to the following:

### **Statewide Pricing**

*Q: Should prices for drinking water services be the same across the state, irrespective of the cost of delivery? Or should prices reflect the effects of local conditions, costs or other circumstances?*

### **Fixed and Variable Prices**

*Q: Should prices be determined on the basis of the long run marginal cost (LRMC) of supply (that is, the cost over several decades)? If so, what factors should be considered in determining the LRMC of water?*

*Q: Should prices reflect any short-run effects on costs (that is, the short run marginal cost (SRMC) of water)? In particular, should prices reflect the scarcity of water during periods of drought or other circumstances and how will this impact water restriction arrangements?*

*Q: Should the current three-tier inclining block tariffs be retained? Why?*

*Q: Should a supply charge be based on the number and size of meters?*

*Q: Should commercial supply charges change from a property value basis to some other basis? What do you recommend?*

### **Vacant properties (rating on abuttal)**

*Q: Should customers who do not connect to the network incur a supply charge?*

### **Subsidised customers**

*Q: Should the price of water be the same for all types of customers, or should different classes of customers pay on a different basis regardless of costs?*

### **Water product quality**

*Q: Should pricing be based on the variability in product quality or reliability?*

*Q: Are there any other matters that the Commission should consider as part of this Inquiry?*

## **FURTHER INFORMATION**

Any queries relating to this consultation should be directed to:

▲ Con Carellas, Manager, Market Analysis

If you would like to keep up to date with the Commission's activities and the release of papers for consultation, subscribe at

<http://www.escosa.sa.gov.au/subscribe.aspx>.

## APPENDIX 1 – SCHEDULE OF SA WATER DRINKING WATER RATES AND CHARGES<sup>8</sup>

### 2013-14 Prices - From 1 July 2013

Water use price	Water price per litre	Indicative quarterly threshold	Indicative daily threshold
\$2.26/kL	\$0.00226	0 to 30kL	0 to 0.3288kL
\$3.23/kL	\$0.00323	30 to 130kL	0.3288kL to 1.4247kL
\$3.49/kL	\$0.00349	Above 130kL	Above 1.4247kL

### Residential water rating system

There is a Statewide price for water. This means that whether you live in Ceduna or Campbelltown, Goolwa or Glenelg, everyone pays the same price per kilolitre (kL, 1 kL equals 1000 litres) for water regardless of the cost of getting that water to your home.

This system is considered the fairest way to spread the cost of providing and maintaining basic water facilities across the community.

Water pricing for residential customers is broken down into:

- A fixed charge for supplying the service.
- A variable pricing system for water use - the more you use, the higher your bill.

Residential properties include houses, maisonettes, home units, flats and strata/community title residences and vacant residential land. In practice, prices are expressed on a daily basis to take account of the fact that the number of days between meter readings can vary.

### Strata and community title properties

If your home is part of a Strata or Community Title Corporation and the water supply is provided through one meter, there are three available options for water use billing.

Your Strata or Community Title Corporation Secretary can apply to SA Water, for one of the following billing options to be implemented:

- An even split between all of the units which is included on each individual owner's accounts
- An uneven split (agreed by the owners) included on individual owner's accounts
- An account sent direct to the Corporation Secretary

### Non-residential water rating

SA Water has two categories of non-residential customers:

- Commercial customers, including retail, wholesale, and various other service providers.
- Other non-residential customers, including industrial and rural customers, hospitals and hotels.

#### Commercial Customers

Customers classified commercial for the purpose of the water rating system are broadly those with land use codes related to the wholesale, retail, finance and other service sectors.

The water price structure for commercial customers comprises a supply charge, based on the capital value of your property and a single water use charge.

Water supply charge: quarterly charge based on the following

The greater of:

- \$68.70/ quarter;

OR

- a charge based on the capital value of your property.

Your property valuation is set by the Valuer-General each year in June for the next 12 months.

Water use charge: based on the amount of water you use and therefore varying each billing quarter. It is calculated based on a single price of \$3.23/kL.

#### Other non-residential customers

The Water price structure for other non-residential customers comprises a supply charge and a single water use charge. The Water supply charge for 2013-14 is \$68.70/quarter. The water use charge, based on the amount of water you use and therefore varying each billing quarter, is calculated based on a single price of \$3.23/kL.

<sup>8</sup> <http://sawater.com.au/SAWater/YourHome/YourAccountBillPaymentCharges/Pricing+Information.htm> accessed 16 July 2013

## APPENDIX 2 – SUMMARY OF JURISDICTIONAL RESIDENTIAL DRINKING WATER PRICING PRACTICES

STATE	METROPOLITAN UTILITY	SUPPLY/ACCESS/SERVICE CHARGE	CONSUMPTION CHARGE	CHARGE FOR PROPERTIES NOT CONNECTED BUT AVAILABLE FOR CONNECTION
South Australia	<a href="#">SA Water</a>	fixed flat	inclining block tariffs three tiers	Yes
Victoria	<a href="#">City West Water</a> <a href="#">South East Water</a> <a href="#">Yarra Valley Water</a>	fixed flat	inclining block tariffs three tiers	No
	<a href="#">Western Water</a>	fixed by connection size	inclining block tariffs three tiers	No
New South Wales	<a href="#">Sydney Water</a>	fixed based on meter type	single tariff	No
	<a href="#">Hunter Water</a>	fixed	single tariff	No
	<a href="#">Gosford City Council</a> <a href="#">Wyong Shire Council</a>	fixed	single tariff	Yes
Western Australia	<a href="#">Water Corporation</a>	fixed	inclining block tariffs three tiers	Yes
Queensland	<a href="#">Urban Utilities</a> <a href="#">Unity Water</a>	fixed	inclining block tariffs three tiers	Yes
ACT	<a href="#">ACTEW</a>	fixed	inclining block tariffs two tiers	Yes
Tasmania	<a href="#">TasWater</a>	fixed by connection size	single tariff	Yes
Northern Territory	<a href="#">Power and Water Corp</a>	fixed by connection size	single tariff	No





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