SA Water

14 February 2019

Mr Lewis Owens
Independent Inquirer
South Australian Water Pricing Inquiry
Level 5, Wakefield House
30 Wakefield Street
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Dear Lew

Thank you for the opportunity to contribute information in support of a thorough analysis and robust conclusion to the Inquiry into Water Pricing in South Australia.

Further to your discussion with the Board of SA Water in November last year and the *A Cautious Conclusion* (ACC) paper, the Board and I would like to provide the following information to the Inquiry on behalf of SA Water.

Our role and context

As the state's leading provider of water and sewage services for around 1.7 million people, SA Water continues to work together with customers and communities to ensure a reliable supply of safe, clean water and a dependable sewerage system. With a focus on ensuring services represent excellent value, improving performance for customers and achieving strategic targets, SA Water listens to customers. The people who depend on these services helped shape SA Water's vision – world class water services for a better life – and this is underpinned by a business strategy that sets the path, guides decisions and ensures collective focus and aligned values in delivering essential water services the length and breadth of South Australia, every day.

Australian and South Australian government policy and legislation also guide and inform our business decisions and actions. The most relevant policy and legislation includes:

1. National Competition Policy, based on the principle that government owned companies should not enjoy a competitive advantage over private businesses operating in the same market, simply as a result of their public sector ownership.

2. 2004 Intergovernmental Agreement on a National Water Initiative (NWI) and the subsequently agreed NWI Pricing Principles promote efficient and sustainable use of water resources and water infrastructure assets. All parties agreed that the mechanisms for achieving the objectives would be consumption based pricing, full cost recovery, transparent subsidies (or community service obligations) and independent review of prices or price setting processes. The South Australian government agreed to these principles.

3. *Public Corporations Act 1993* (Public Corporations Act) requires a South Australian public corporation to "perform its commercial operations in accordance with prudent commercial principles and use its best endeavours to achieve a level of profit consistent with its functions". It also enables the South Australian government to specify non-commercial operations and to provide direction to the operation of SA Water.

4. *Essential Services Commission Act 2002* establishes the Essential Services Commission of South Australia (ESCOSA) to ensure the "protection of the long term interests of South Australian consumers with respect to the price, quality and reliability of essential services" including those provided by SA Water.

Managing SA Water requires us to responsibly implement government policy and abide by legislation, as well as provide advice and guidance. In this regard, we have information and knowledge that can assist the inquiry as detailed herein.

A sustainable and efficient business

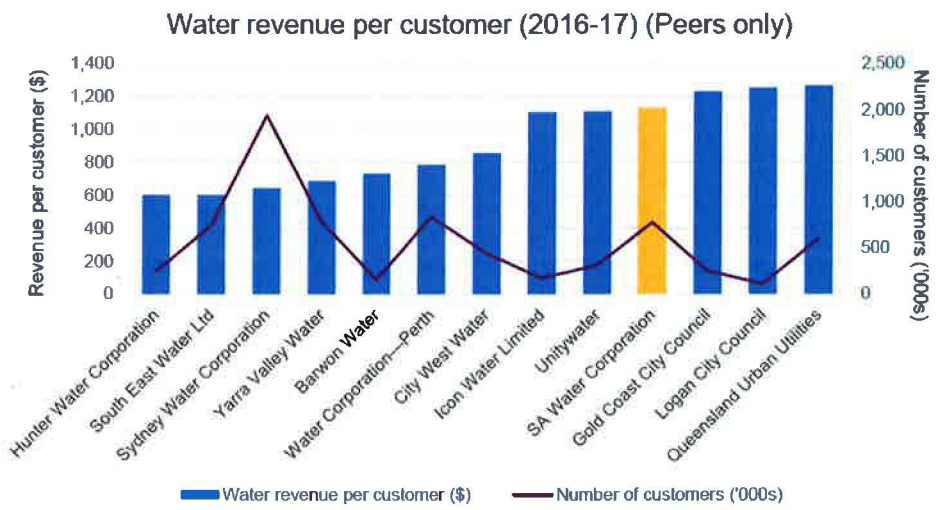
In addition to providing a reliable supply of safe, clean water and a dependable sewerage system, we know the price of these essential services is really important to our customers, so we work to deliver our services in the most efficient way possible.

To ensure the ongoing provision of services our customers and community value, one of our duties as directors of SA Water is to protect the long term financial viability of SA Water and the state's financial interest in SA Water.

The Inquiry's terms of reference require consideration of the regulated asset bases (RABs) in other jurisdictions, having regard to key drivers and variables that may affect the value. ACC presents a range of benchmarking to consider the reasonableness of the water RAB and concludes:

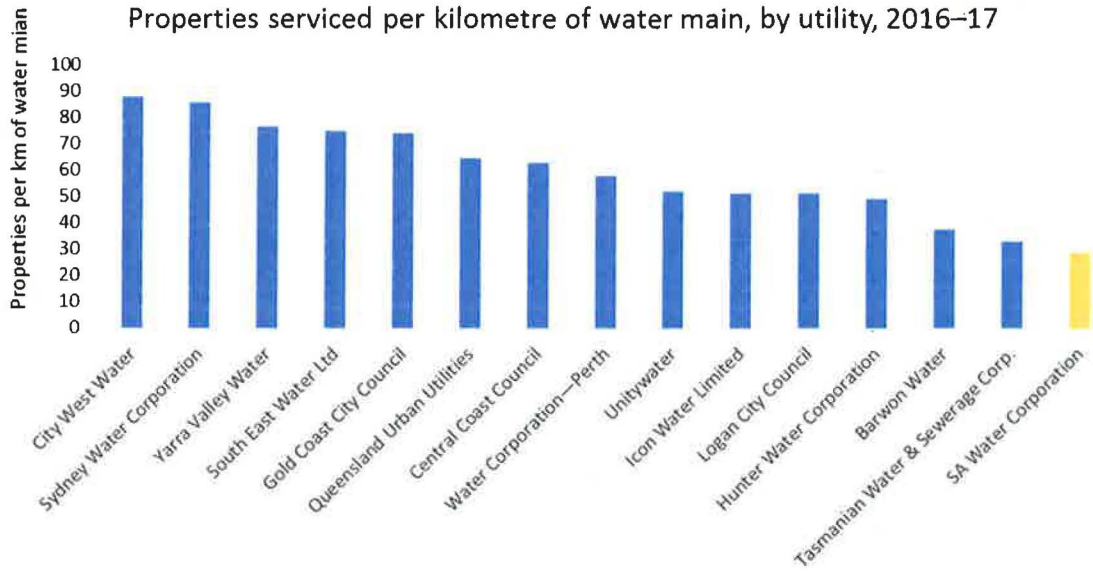
- The Water RAB to Financial Water Asset Value is reasonable when compared to other jurisdictions.
- Financial Water Asset Value is toward the high end compared to other jurisdictions (when using customer numbers and volume of water supplied).

High level analysis of revenue per customer is presented in the graph below[1]. If you do not consider the low density population, geography of South Australia and the large amount of assets required to support customers this analysis may initially support the ACC findings that revenue per customer is on the mid to high end compared to our peers.

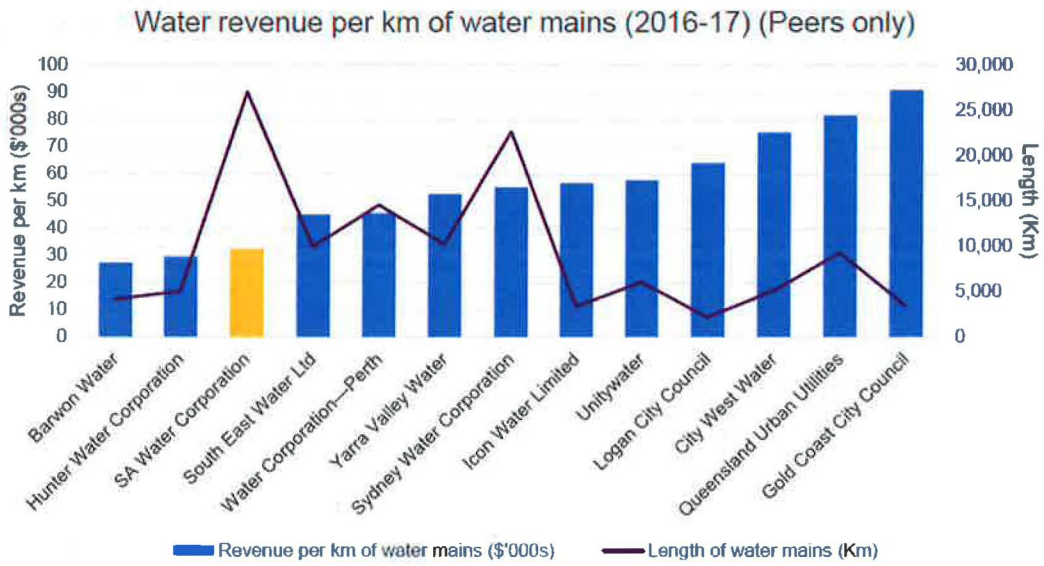


[1] Data sourced from Bureau of Meteorology's 2016-17 National Performance Report

However, the graph above and the Inquiry's benchmarking do not reflect that South Australia has the lowest number of water customers per kilometre of water main as shown in the graph below[2].



SA Water also has the longest network of all Australian water utilities, as shown in the graph below[3], with the revenue earned per kilometre of water main toward the low end when compared with other water utilities.

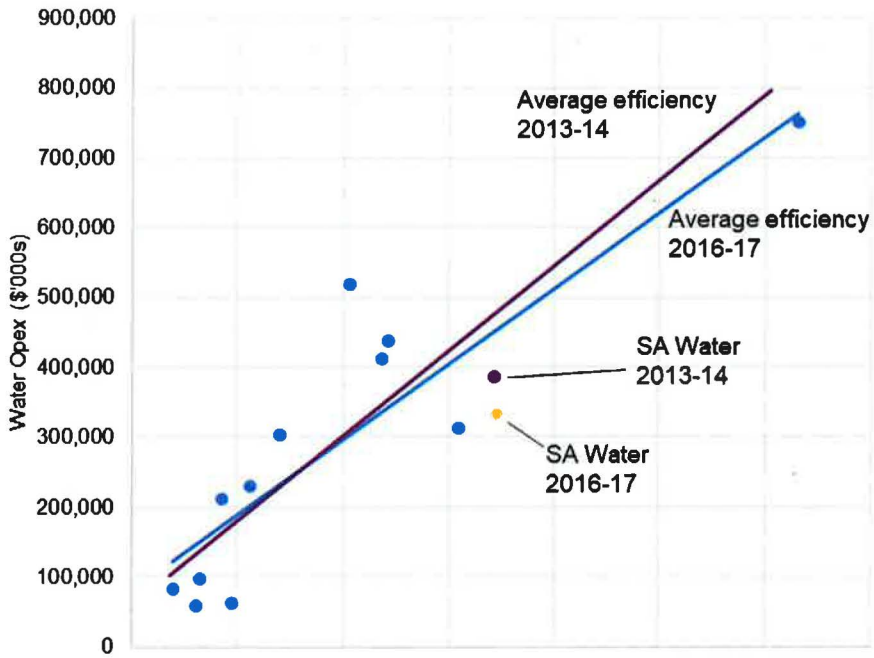


[2] Data sourced from Bureau of Meteorology's 2016-17 National Performance Report
[3] Data sourced from Bureau of Meteorology's 2016-17 National Performance Report

Benchmarking the water RAB in isolation can be problematic as it conceals different approaches taken in various states. For example:

- Revenue subsidies provided by the South Australian government to support affordable services for regional customers, benefits them although there is no downward adjustment to the water RAB.
- Funding choices for significant investments (e.g. desalination plants) can mean the value is included in the RAB or alternatively recognised as operating payments. Benchmarking operating performance/productivity is an important complementary benchmarking consideration.

To compare productivity across jurisdictions, KPMG has previously noted a positive correlation between operating expenditure and the combination of number of customers (C), length of mains (L) and demand per customer (D)[4] - CLD. A more updated CLD analysis (refer graph below[5]) shows SA Water provides metropolitan and regional water services more efficiently than the average of peer organisations. The analysis also demonstrates our ongoing commitment to improving efficiency over time.



[4] SA Water 2016 Regulatory Business Proposal, Attachment F, KPMG
[5] Based on same group of peers as other benchmarking charts

Changes to the water RAB arising from the Inquiry, combined with potential outcomes based on ESCOSA's current rate of return methodology could significantly impact on SA Water's revenue. In an extreme case, this could put the long term viability of SA Water at risk (credit rating below the BBB benchmark used in the regulatory framework) and also impact our ability to maintain existing levels of service to customers. Analysis of comparable organisations shown in the table[6] below indicates SA Water is already generating a lower return on investment than water utilities operating in other jurisdictions. It demonstrates we are not fully recovering the costs of South Australia's significant water infrastructure investment and a reduction in the water RAB will make this gap wider.

	2013/14	2014/15	2015/16	2016/17	2017/18
SA Water	3.64%	4.22%	4.54%	3.71%	3.72%
Sydney Water	7.13%	7.42%	7.21%	5.96%	6.78%
Melbourne Water	5.96%	6.01%	6.92%	6.03%	6.43%
Water Corp WA	7.61%	8.50%	7.84%	6.92%	6.82%
Icon Water	7.03%	6.73%	7.27%	6.22%	6.40%
Yarra Valley Water	4.46%	4.47%	4.63%	4.66%	5.26%
South East Water	5.76%	5.35%	6.64%	6.94%	7.69%
Queensland Urban Utilities	5.53%	6.95%	7.69%	9.01%	7.84%

It is our understanding the Inquiry will not undertake a detailed review of the rate of return methodology given the level of public debate occurring at this time. However, to ensure SA Water's long term financial viability, the rate of return methodology adopted in the upcoming regulatory period may be an important transition mechanism for the Treasurer, the Inquirer or ESCOSA to consider.

Contributed assets and legacy assets

ACC identifies treatment of pre-corporatisation contributed assets and the use of legacy assets as two distinct issues for the Treasurer's consideration. ACC suggests downward adjustments to the water RAB of between $161 million and $504 million for pre-corporatisation contributed assets and a notional adjustment for legacy assets ($500 million referenced in ACC).

As described more fully below, it is our understanding these issues are linked and were considered by the Treasurer within the 2013 water RAB value.

6 Earnings before Interest and Tax / Average Total Assets sourced from published annual reports of each utility between 2013/14 to 2017/18

The intent of the NWI was for jurisdictions to move to full cost recovery to promote the efficient use of water and wastewater assets whilst also removing cross subsidies. Department of Treasury and Finance documentation (Transparency Statements) showed how, over many years, the South Australian government attempted to fulfil the commitment to full cost recovery.

In determining full cost recovery, the NWI required jurisdictions to be transparent in their treatment of assets contributed by developers or other customers. Further, where these assets could be reliably estimated, the NWI required they be removed from the water RAB on the principle customers should not pay for these assets until they need to be maintained, replaced or improved by SA Water.

In late 2004, the South Australian government considered the value of the assets used for full cost recovery:

a) Contributed assets between 1995 and 2004 were estimated and deducted from the RAB.
b) Various estimates for pre-corporatisation contributed assets (assets built prior to 1995) were made. ACC refers to these as valuations however we note the associated correspondence consistently presented these as preliminary estimates only. In 2004, the South Australian government concluded the preliminary estimates were highly subjective and could not be used to reliably estimate a value for pre-corporatisation assets.

For all states and territories, movement to full cost recovery would have significantly increased water prices as water costs across Australia were not being fully recovered at that time. To moderate this impact the NWI allowed jurisdictions to draw a line in the sand whereby asset values were adjusted to reflect the value of the revenues being earned or to determine a legacy date whereby a minimum rate of return was set reflecting the value of the revenues being earned.

To demonstrate movement towards full cost recovery, the South Australian government elected to adopt the legacy date approach. A legacy date of 30 June 2006 was selected, setting a minimum rate of return of 3.1 per cent on the existing water assets which was well below the required rate of return of 6 per cent at that time. This effectively locked in the lower prices customers were already paying for those assets.

The South Australian government's 2008-09 Transparency Statement states "Essentially, the contributed asset issue has been overtaken by general principles for consistent approaches to pricing, pending finalisation of those principles."

Prior to the South Australian government setting the water RAB in 2013 the legacy water assets were earning a return of 4.62 per cent. When the water RAB was set by the Treasurer in 2013 the legacy water assets were effectively written down in the order of $0.6 billion (June 2013 dollars) to achieve the 5.06 per cent (pre-tax real) rate of return set by ESCOSA. Setting the water RAB in this way effectively locked previous asset decisions into one RAB value without increasing water prices, profitability or contributions to the South Australian government. This approach is broadly consistent with the line in the sand approach used in transition to economic regulation.

Country legacy assets

A legacy date was not set for regional assets as annual revenue received by SA Water was at full cost recovery with a transparent subsidy from the South Australian Government, via community service obligation payments. For customers, the subsidy approach has the equivalent impact as reducing the water RAB value. This subsidy remains in place, at a fixed nominal amount of $107.6 million for water

and wastewater services. This provides pricing transparency while making it clear that South Australia is not fully recovering the costs of water and wastewater services from customers living in regional areas.

Any change to the water asset base will require the Treasurer to also consider if the subsidy should be reduced or removed.

2013 Rate of Return or "Declining Value of the WACC"

ACC makes reference to the declining value of the weighted average cost of capital (WACC) and the letters exchanged between ESCOSA and the Treasurer in 2013.

We understand the $420 million variance referenced in ACC was calculated by de-escalating the closing balance water RAB from June 2013 dollars to December 2012 dollars using two CPI data points (March to September 2012). An alternate approach would be the use of four CPI data points as this represents an annual price change and smooths seasonal volatility and expenditure classes that are only collected annually. The table below shows a change in method would lower the RAB variance stated in ACC.

	Water RAB $million	Variance to Pricing Order $million
Pricing Order (Dec$12)	**7770**	
2012-13 Regulatory Statement Closing Balance		
June$13 (No Escalation)	7489	-281
Dec$12 (Annualised Method)	7415	-355
Dec$12 (ACC Method)	7349	-421

CPI Inflators and Capital Expenditure

ACC has calculated that adjusting the indexation to CPI and using actual capital expenditure would reduce the water asset base by $88 million. With regards to this calculation:

1. Capital Expenditure

ACC considers whether capital costs prior to economic regulation should be adjusted for an efficiency that may have been achieved in a regulatory environment. ACC concludes that it is reasonable to include the actual capital costs in the water RAB and the Board agrees with this conclusion based on the ACC discussion.

During the Millennium Drought from 2001 to 2009, recycled water schemes were pursued to source additional water with recycled water capital expenditure actually allocated to the water RAB. As time progressed, recycled water schemes were pursued for environmental benefits so recycled water capital expenditure incurred since this time has been allocated to the Sewerage RAB.

Based on this approach to allocation, the following recycled schemes are included in the current water RAB:

	Net expenditure (gross capex less federal funding) $million, nominal						
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Glenelg Reuse Scheme[7]	0.045	3.201	38.153	3.966	0.289	0.084	**45.738**
Southern Reuse[8]	0.000	0.552	7.688	26.773	7.660	1.164	**43.837**

The models supporting ACC do not appear to include this capital expenditure for recycled water assets in the water RAB, possibly to follow the more recent allocation treatment as outlined above. To be consistent with historic practice, the Inquiry's modelling should include an additional $90 million of recycled water capital expenditure within the water RAB, or alternatively, a corresponding upward adjustment to the Sewerage RAB would be required.

2. Depreciation

ACC uses a two per cent assumption to depreciate the water RAB. A detailed calculation of regulatory depreciation using the weighted average useful lives from ESCOSA's 2013 Final Determination (between seven and 103 years) would lower the depreciation presented in ACC by around $22 million.

3. Inflation

Use of CPI to escalate the RAB is common practice for regulators and consistent with ESCOSA's current approach.

One objective of the building block model is to provide a reasonable return on the current market value of assets as consideration of replacement cost. Based on this, it is questionable whether CPI is the best asset escalator for businesses with long life assets which are impacted by the price of construction inputs rather than the general consumer inputs. The producer price index (PPI) may be a more appropriate escalator as it focuses on price changes of production.

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[7] https://www.treasury.sa.gov.au/__data/assets/pdf_file/0004/38065/transparency-statement-200809-part-a.pdf , page70 - the Glenelg Reuse Scheme *"will free up stressed ground water resources and River Murray water that is currently used to water parklands and supply commercial developments in the city."*

[8] https://www.treasury.sa.gov.au/__data/assets/pdf_file/0004/38065/transparency-statement-200809-part-a.pdf , page70 - Waterproofing the South *"is an integrated approach to expanding or substituting traditional sources of water with alternative sources."*

The following table[9] summarises the respective indices for the period in review along with a comparison to the percentage change for SA Water's financial asset value. Of note:

- The water RAB in 2013 would be around $160 million higher than the RAB calculated in ACC using PPI over this period.
- The change in actual financial asset values (as determined by replacement costs) is higher than CPI overall and significantly varies on a year to year basis.

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
CPI National (ABS, Mar to Mar)	3.30%	2.00%	2.40%	2.90%	2.50%	4.30%	2.40%	2.90%	3.30%	1.60%
PPI National (ABS, June 2018)	4.50%	4.57%	4.87%	3.45%	5.98%	0.43%	2.59%	4.64%	0.91%	1.50%
SA Water asset revalue % change	2.93%	2.41%	3.11%	8.73%	5.88%	5.42%	11.68%	7.80%	1.29%	1.11%

Inclusion of Adelaide Desalination Plant costs

ACC considers the costs of the Adelaide Desalination Plant (ADP) including subsequent expansion should be maintained in the water RAB. The Board support this position as the ADP is a critical water security asset.

The ADP continues to be a significant asset and insurance for the management of water security for Adelaide. Our customers' value and expect a reliable and secure water supply. We have continued to operate the ADP in "minimum production mode" to ensure it is ready and available if drought conditions exist in the Murray River. The ADP supplies water via the Happy Valley Water Treatment Plant and is also used to manage operational risks as they arise.

The Board and I would welcome the opportunity to discuss these matters further, either directly or at one of the upcoming stakeholder workshops where SA Water will be participating.

Yours sincerely,

Roch Cheroux
Chief Executive

[9] ABS catalogue no. 6401 – Consumer Price Index, Australia, All groups Index number (weighted average of eight capital cities) used to calculate percentage change from corresponding quarter previous year, using 9 month lag methodology as per regulatory requirements i.e. March 2002 to March 2003 is used as the CPI for 2003/04.

ABS catalogue no. 6427 – Producer Price Index, Australia, Final domestic, calculated percentage change from corresponding quarter previous year.