



Barwon Water response

ESC draft determination

2018 Water Price Review

Response Date: 8 May 2018

Executive Summary

Barwon Water welcomes the opportunity to provide this response to the Essential Services Commission (ESC) on Barwon Water's 2018 water price review draft determination.¹

Our response is structured around the key adjustments made in the draft determination:

1. Labour expenditure
2. Electricity Expenditure
3. Licence fees
4. Environmental contribution
5. Form of Price Control
6. Cost of Debt adjustment
7. Adjusting prices

We have also proposed an adjustment on the Melbourne headworks charge pre-payment made in 2015-16. We propose to capitalise this to ensure a return on this expense and so that treatment is consistent with our remaining Melbourne Water headworks charges in the 2018 regulatory period.

The table below provides a summary of Barwon Water's propose revenue requirement, prices and bill path, following adjustments made in response to the ESC's draft determination.

It should be noted that Barwon Water is proposing a revised revenue required of \$973.2M, which is lower than the ESC's draft determination of \$975.5M.

	Submission	Response to ESC draft Determination
Revenue requirement	\$986.6M	\$973.2M
Price path	-7.4, 0.9, 0.9, 0.9, 0.9	-7.4, 0.4, 0.4, 0.3, 0.2
Owner occupier bill path*	0.0%, 0.9%, 0.9%, 0.9%, 0.9%	0.0%, 0.4%, 0.4%, 0.3%, 0.2%
Tenant bill path*^	0.0%, 0.7%, 3.8%, 3.9%, 4.3%	0.0%, 1.4%, 1.4%, 1.1%, 0.8%
Average business bill path**	0.0%, 0.0%, 0.0%, 0.0%, 0.0%	0.0%, -1.0%, -1.0%, -1.0%, -1.0%

* Assuming annual usage of 160kL

^ Adjusted for Tenant rebate

** Assuming annual usage of 3,000kL

The adjustments made as a result of the draft determination have allowed Barwon Water to maintain its desired outcomes for customers, including (in \$real terms):

- 0% bill impact in first year for all customers (average),
- same annual bill impact (\$) for average (160kL per annum) owner occupiers and tenants,
- minor increases across years 2 to 5 for residential owner occupiers and tenants,
- providing customers greater control over bills, with the 'variable component' of an average bill increasing by year 5 to 73%,
- regaining parity on the *water variable* charge between residential and non-residential customers by year 5,
- a Tenant Rebate Adjustment (TRA) to reduce bill shock on tenants.

The adjustments made as a result of the draft determination have also ensured;

- lower bills for all customers (average), including a decrease for non-residential customer bills of approximately 4% by the end of year 5,
- parity on the *water service* charges between residential and non-residential customers by year 5.

A copy of Barwon Waters updated tariff schedule is also provided in full.

¹ Essential Services Commission 2018, Barwon Water draft decision: 2018 Water Price Review, 28 March

Detailed response

Labour

Draft determination: Barwon Water proposed \$7.90 million above the baseline to cover wage increases above inflation resulting from its enterprise agreement. Deloitte considered that wage increases above inflation should be managed by the water corporation through productivity improvements or through the growth allowance applied to the baseline, as most other water corporations have proposed. Accordingly, Deloitte recommended the removal of the \$7.90 million.

BW response: Barwon Water notes the adjustment, however as per our response to Deloitte's findings, we find that it is important to:

- distinguish between the effect of the EBA and the increase in our FTEs in our proposal, and
- understand why we provided the data in the financial template as we did.

The key point of context is that due to major organisational restructures, Barwon Water's FTE's reduced from 394 in 2012-13 (40 as a result of civil maintenance outsourcing) to a new FTE target of 315 in 2016-17. However due to a number of vacant positions our actual FTE count was at 309 in 2016-17, the baseline year. Therefore, approximately 50% of Barwon Water's proposed increase of \$7.90M was to normalise our FTE gap back to the target of 315 from the 309 count in 2016/17.

As this was a variation to the baseline year, Barwon Water appropriately included these increases in the 'Forecast variations to baseline operating expenditure' section of the ESC's financial template. This was open and transparent, and also in accordance with the ESC guidelines and needed for our Board to attest to the accurate representation of our data.

If Barwon Water had not included these cost as a variation to the baseline expenditure, the proposed increases would have been consolidated into the controllable expenditure resulting in a slightly lower productivity rate.

Electricity

Draft determination: Deloitte compared Barwon Water's proposed forecast with its latest forecast electricity prices and did not agree with Barwon Water's forecasted higher electricity prices continuing beyond 2019-20 through to 2022-23.

We (the ESC) accept Deloitte's recommendation as we consider it reflects a more accurate forecast of efficient electricity costs during the 2018–23 regulatory period. However, we do acknowledge that there is currently uncertainty in forecasting electricity prices and Barwon Water's electricity contract expires on 30 June 2018. We request that Barwon Water proposes a revised electricity forecast based on its new contract prices in response to our draft decision.

BW response: Barwon Water notes the adjustment made to 2019-20 to 2022-23 and acknowledges that there is uncertainty regarding the future movement in electricity prices. We will make these adjustments accordingly.

Barwon Water's now also has an updated electricity forecast for 2018-19, based on new contract prices. The revised forecast for 2018-19 is estimated to total \$6.1M (\$2017-18) for 29,000MWh, compared to Barwon Water's proposed expenditure of \$5.41M for 26,000MWh. Although the new 2018-19 contract/cost estimate is marginally higher per MWh compared to Barwon Water's September 2017 submission, Barwon Water does not propose to adjust our revenue requirement.

Licence fees

Draft determination: Decrease our commission licence fee to \$0.112 million per year and include a value of \$0.169 million in 2022-23 (a total reduction of \$0.368 million).

Decrease the Environment Protection Authority Victoria licence fee to \$0.185 million per year (a total reduction of \$0.020 million)

BW response: Barwon Water has made the adjustment to licence fees accordingly.

Environmental Contribution

Draft determination: Increase the environment contribution from \$8.20 million up to \$8.22 million for 2018-19 and decline this value across the period (a total reduction of \$0.93 million).

Assumed that this will remain flat in nominal terms (decline in real terms) across the 2018–23 regulatory period.

BW response: Barwon Water has made this adjustment, however, notes the risk of potential under recovery if the Department imputes inflation into the Environmental Contribution during the next revenue-tranche recalculation cycle.

Form of price control

Draft determination: Our draft decision is not to accept Barwon Water's proposed form of price control because:

- Barwon Water has not proposed an annual adjustment mechanism to reflect our approach to the cost of debt, as required by our guidance.
- Its proposed form of price control is relatively complex and does not enable customers to easily understand the prices charged, or the manner in which prices may be calculated, determined, or otherwise regulated.
- It may allow Barwon Water to hold any over-recovery of revenue arising from higher than expected demand, or a lower cost of debt, until the next regulatory period (that is, the regulatory period from 1 July 2023). As stated in our guidance paper, we prefer annual adjustments to prices for the cost of debt, as this better aligns prices with efficient costs.
- Barwon Water has not demonstrated that the new price control better satisfies the requirements of the WIRO than the existing structure.

BW response: Barwon Water notes the ESC view and will consider alternative controls that will address the Commission's comments in consultation on with our customers to propose in the next regulatory period.

Barwon Water's response to the annual cost of debt adjustments and proposed price adjustment formulas is provided directly below.

Cost of debt adjustment

Draft determination: We propose not to accept Barwon Water's proposed cost of debt adjustment mechanism as it is based on an actual, and not a benchmark cost of debt. We consider a benchmark cost of debt provides businesses with incentives to efficiently manage debt levels. We invite Barwon Water to submit a cost of debt adjustment mechanism based on our benchmark cost of debt.

BW response:

As part of the transition to a ‘trailing average’ approach to estimating the cost of debt, the ESC’s Guidance Paper² requires us to propose a price adjustment mechanism (including price control formulas) that allows for prices to adjust on an annual basis to reflect movements in the cost of debt.

In accordance with these requirements, Barwon Water proposes to estimate the allowed return on debt using a trailing average portfolio approach as follows:

- the length of the averaging period to be 10 years
- equal weights to be applied to all 10 elements of the trailing average
- the trailing average to be automatically updated every regulatory year within the regulatory control period.

Barwon Water proposes to update the cost of debt each year as set out below based on the benchmark cost of debt.

We note that this is a proposal only and that Barwon Water would welcome the opportunity to work with the Commission and rest of the water industry to develop a consistent formula prior to the release of the final determinations.

Step 1: calculate the updated benchmark cost of debt for regulatory year t in accordance with section 3.9 of the ESC’s Guidance Paper³:

$$BCOD_t^{updated} = \sum_{j=t-10}^{t-1} \frac{BCOD_j}{10}$$

Step 2: calculate the revenue impact, REV_t , of the updated benchmark cost of debt for regulatory year t:

$$REV_t = 0.6 \times (BCOD_t^{det} - BCOD_t^{updated}) \times RAB_t \times \frac{CPI_t}{CPI_{base}}$$

Step 3: calculate the annual adjustment to prices for the updated benchmark cost of debt for regulatory year t:

$$ADJ_t = \left(\frac{MAR_t - REV_t}{MAR_t} \right)$$

Where:

$$MAR_t = BRR_t \times \frac{CPI_t}{CPI_{base}}$$

Where:

$BCOD_t$	is the benchmark cost of debt for regulatory year t
REV_t	is the required revenue adjustment for regulatory year t
RAB_t	is the average of the opening and closing regulated asset base specified in the determination for regulatory year t
MAR_t	is the benchmark revenue requirement specified in the determination, expressed in nominal terms, for regulatory year t
BRR_t	is the benchmark revenue requirement specified in the determination, expressed in real terms, for regulatory year t

² Essential Service Commission, 2018 Water Price Review Guidance paper, November 2016, page 60.

³ Essential Service Commission, 2018 Water Price Review Guidance paper, November 2016, pages 43 and 44.

CPI	the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter
t	denotes the year
det	denotes the value in the determination
updated	denotes the updated data
base	denotes the base year, 2018-19

Adjusting prices

Draft determination: We propose not to accept Barwon Water's proposed price adjustment formulas. Barwon Water must respond to our draft decision with price adjustment formulas that ensure prices adjust annually to reflect efficient costs.

BW response: We propose to retain the current form of control, where each price for prescribed services is subject to a maximum annual increase defined by the following formula⁴:

$$P_t = P_{t-1} \times CPI_t \times (1 + PPM_t) \times ADJ_t$$

Where:

P_t is the price component for regulatory year t

P_{t-1} is the price component for regulatory year t-1

CPI_t for the particular regulatory year is

the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the start of the relevant regulatory year

divided by

Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the March quarter referred to above

PPM_t is the prescribed price movement for the price component for regulatory year t determined in accordance with the determination

ADJ_t is an annual adjustment to prices for the updated benchmark cost of debt for regulatory year t, calculated in accordance with the steps outlined above.

Other adjustments

We propose to retain the current price adjustment mechanisms to address the impact of uncertain and unforeseen events, examples of which include⁵:

- actual licence fees or contributions payable which differ from the forecasts set out in the price determination
- changes in the timing or scope of expenditure on major capital projects
- instances where the ESC is satisfied that there is a material difference between the forecast demand levels set out in the price determination and actual demand levels
- a change in relevant legislation or in a licence issued under that legislation
- a change in a relevant tax
- a change in the Statement of Obligations.

⁴ Essential Services Commission, 2013 Water Price Review, Barwon Water Determination 1 July 2013 to 30 June 2018, June 2013 page 5.

⁵ ESC, 2013 Water Price Review - Barwon Water Determination, 1 July 2013 to 30 June 2018, clause 4.2.

New minor adjustments

Melbourne headworks charge

Draft determination: Barwon Water notes that the draft determination accepted Barwon Water's treatment of the Melbourne headworks costs incurred during the upcoming period. Barwon Water proposed to capitalise these costs in the best interest of customers, as it kept bills down and reduced bill shock associated with this newly incurred cost.

BW response: In light of the draft determination and ESC's acceptance of this capitalisation, Barwon Water has reconsidered the treatment of the \$21.65M pre-payment of the Melbourne Water headworks charge incurred in the 2013-2018 period, which we had not originally included in our submission.

To ensure a return on this expense and remain consistent, Barwon Water now proposes a slight adjustment to the 2018-23 regulatory period, by capitalising the \$21.65M pre-payment. Capitalising the pre-payment will result in Barwon Water's revenue requirement increasing by a total of \$4.5M over the next regulatory period.

2018-19 Victorian State Budget

The Victorian State Budget included a proposal to reduce the Payroll Tax from 3.7% to 2.4% in 2018-19 and beyond. This would reflect an annual reduction in Barwon Water's expenditure by \$0.4M per annum

Barwon Water has updated this accordingly in the financial template resulting in a reduction in the revenue requirement of \$2M over the next regulatory period.

Updated 2017-18 trailing average cost of debt

Barwon Water has updated the financial template accordingly to reflect a cost-of-debt of 4.5% in 2017-18 as per advice from the ESC 11 April 2018.

Propose revenue requirement and price bill path

Revenue requirement

Barwon Water is proposing a revised revenue required of \$973.2M, which is lower than the ESC's draft determination of \$975.5M.

The overall change in Barwon Waters' revenue requirement is a decrease of \$13.4M, as shown below.

Revenue requirement	2018-19	2019-20	2020-21	2021-22	2022-23	Total
September Submission	\$193.1	\$195.2	\$198.1	\$200.5	\$199.7	\$986.6
ESC Draft Determination	\$191.7	\$193.7	\$195.4	\$197.7	\$196.9	\$975.5
Response to ESC Draft determination	\$191.30	\$193.25	\$194.95	\$197.27	\$196.45	\$973.2

Price and Bill Path

The decrease in revenue requirement results in a decrease in bills for all of Barwon Water's customers as shown in the table below.

	Submission	Response to ESC draft Determination
Revenue requirement	\$986.6M	\$973.2M
Price path*	-7.4, 0.9, 0.9, 0.9, 0.9	-7.4, 0.4, 0.4, 0.3, 0.2
Owner occupier bill path*	0.0%, 0.9%, 0.9%, 0.9%, 0.9%	0.0%, 0.4%, 0.4%, 0.3%, 0.2%
Tenant bill path*^	0.0%, 0.7%, 3.8%, 3.9%, 4.3%	0.0%, 1.4%, 1.4%, 1.1%, 0.8%
Tenant Rebate Adjustment^	\$20, \$32, \$36, \$40, \$43	\$20, \$25, \$30, \$36, \$43
Average business bill path**	0.0%, 0.0%, 0.0%, 0.0%, 0.0%	0.0%, -1.0%, -1.0%, -1.0%, -1.0%

* Assuming annual usage of 160kL

^ Adjusted for Tenant rebate

** Assuming annual usage of 3,000kL

The adjustments made as a result of the draft determination have allowed Barwon Water to maintain its desired outcomes for customers, including (in \$real terms):

- 0% bill impact in first year for all customers (average),
- same bill impact (\$) for average (160kL per annum) owner occupiers and tenants,
- minor increases across years 2 to 5 for residential owner occupiers and tenants,
- providing customers greater control over bills, with the 'variable component' of an average bill increasing by year 5 to 73%,
- regaining parity on the *water variable* charge between residential and non-residential customers by year 5,
- a Tenant Rebate Adjustment (TRA) to reduce bill shock on tenants.

The adjustments made as a result of the draft determination have also ensured;

- lower bills for all customers on average, including a decrease for non-residential customer bills of approximately 4% by the end of year 5 (assuming 3,000kL per annum),
- parity on the *water service* charges between residential and non-residential customers by year 5,

Tariff Schedule

The table below outlines Barwon Water's core tariffs and movements over the 2018-19 to 2022-23 regulatory period in \$2018-19 using the latest March inflation estimates as published by the Australian Bureau of Statistics in late April 2018 of 1.90%.

Tariff (\$2018-19)	Unit	2018-19 Tariff	2018-19 PPM	2019-20 PPM	2020-21 PPM	2021-22 PPM	2022-23 PPM
Residential							
Water volume charge	\$/kL	1.9198	-16.6%	3.0%	2.9%	2.9%	2.8%
Water service charge	\$/year	154.58	-11.6%	-3.4%	-3.7%	-4.3%	-5.2%
Sewer service charge	\$/year	563.58	0.0%	0.0%	0.0%	0.0%	0.0%
Non Residential							
Water volume charge	\$/kL	2.3020	0.0%	-1.7%	-1.7%	-1.7%	-1.7%
Water service charge	\$/year	174.96	0.0%	-7.1%	-7.1%	-7.1%	-7.1%
Sewer service charge	\$/year	341.00	0.0%	0.0%	0.0%	0.0%	0.0%
Sewer volume charge	\$/kL	1.9131	0.0%	0.0%	0.0%	0.0%	0.0%
Residential recycled water							
Class A recycled water	\$/kL	1.3438	-27.0%	3.0%	2.9%	2.9%	2.8%
Non-residential recycled water							
Class A recycled water	\$/kL	1.6114	-12.5%	-1.7%	-1.7%	-1.7%	-1.7%
Class C - Black Rock	\$/ML	395.26	n/a	0.0%	0.0%	0.0%	0.0%
Class C - Black Rock 'take-or pay'	\$/ML	305.70	n/a	0.0%	0.0%	0.0%	0.0%
Class C - Portarlington	\$/ML	233.68	n/a	0.0%	0.0%	0.0%	0.0%
Class C - Winchelsea	\$/ML	233.68	n/a	0.0%	0.0%	0.0%	0.0%
Class C - Angelsea	\$/ML	99.13	n/a	0.0%	0.0%	0.0%	0.0%
Class C - Apollo Bay	\$/ML	99.13	n/a	0.0%	0.0%	0.0%	0.0%
Fire Services							
Fire Service charge	\$/year	246.99	0.0%	0.0%	0.0%	0.0%	0.0%
Geelong region — Trade waste tariffs							
Trade waste volume charge	\$/kL	1.9131	0.0%	0.0%	0.0%	0.0%	0.0%
COD > 1200mg	\$/kg	0.2710	0.0%	0.0%	0.0%	0.0%	0.0%
SS > 500mg	\$/kg	0.2027	0.0%	0.0%	0.0%	0.0%	0.0%
TKN > 60mg	\$/kg	1.1831	0.0%	0.0%	0.0%	0.0%	0.0%
S > 50mg	\$/kg	1.2931	0.0%	0.0%	0.0%	0.0%	0.0%
Colac region — Trade waste tariffs							
Trade waste volume charge	\$/kL	1.9131	0.0%	0.0%	0.0%	0.0%	0.0%
COD > 1200mg	\$/kg	0.4708	0.0%	0.0%	0.0%	0.0%	0.0%
SS > 500mg	\$/kg	0.2737	0.0%	0.0%	0.0%	0.0%	0.0%
TKN > 60mg	\$/kg	1.4248	0.0%	0.0%	0.0%	0.0%	0.0%
S > 14mg	\$/kg	3.3423	0.0%	0.0%	0.0%	0.0%	0.0%
Application fees							
Application fee - permit	\$/app	146.43	0.0%	0.0%	0.0%	0.0%	0.0%
Application fee - agreement	\$/app	528.81	0.0%	0.0%	0.0%	0.0%	0.0%
Annual fee							
Category 5	\$/year	2440.92	0.0%	0.0%	0.0%	0.0%	0.0%
Category 4	\$/year	981.24	0.0%	0.0%	0.0%	0.0%	0.0%
Category 3	\$/year	442.57	0.0%	0.0%	0.0%	0.0%	0.0%
Category 2	\$/year	250.56	0.0%	0.0%	0.0%	0.0%	0.0%
Category 1	\$/year	187.07	0.0%	0.0%	0.0%	0.0%	0.0%
Re-Sampling & Analysis of Non-Compliant Trade Waste	\$/item	366.07	0.0%	0.0%	0.0%	0.0%	0.0%
Asset Protection Fee	\$/item	1248.08	0.0%	0.0%	0.0%	0.0%	0.0%
Re-assessment of risk ranking	\$/item	162.68	0.0%	0.0%	0.0%	0.0%	0.0%
Contravention Charges							
Unpermitted discharge – category 1	\$/item	813.59	0.0%	0.0%	0.0%	0.0%	0.0%
Unpermitted discharge – categories 2-5	\$/item	1627.24	0.0%	0.0%	0.0%	0.0%	0.0%
Reporting violation – category 1	\$/item	325.39	0.0%	0.0%	0.0%	0.0%	0.0%
Reporting violation – categories 2-5	\$/item	813.59	0.0%	0.0%	0.0%	0.0%	0.0%

Tariff (\$2018-19)	Unit	2018-19 Tariff	2018-19 PPM	2019-20 PPM	2020-21 PPM	2021-22 PPM	2022-23 PPM
Monitoring violation – category 1	\$/item	325.39	0.0%	0.0%	0.0%	0.0%	0.0%
Monitoring violation – categories 2-5	\$/item	650.86	0.0%	0.0%	0.0%	0.0%	0.0%
Discharge violation – type 1, category 1	\$/item	813.59	0.0%	0.0%	0.0%	0.0%	0.0%
Discharge violation – type 1, categories 2-5	\$/item	1627.24	0.0%	0.0%	0.0%	0.0%	0.0%
Discharge violation – type 2, category 1	\$/item	406.78	0.0%	0.0%	0.0%	0.0%	0.0%
Discharge violation – type 2, categories 2-5	\$/item	813.59	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment violation – category 1	\$/item	406.78	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment violation – categories 2-5	\$/item	813.59	0.0%	0.0%	0.0%	0.0%	0.0%
New Customer Contributions (per lot)							
Water (incl. Recycled Water) - greenfill	\$/lot	3042.22	5.9%	0.0%	0.0%	0.0%	0.0%
Water (incl. Recycled Water) - infill	\$/lot	613.55	-78.6%	0.0%	0.0%	0.0%	0.0%
Sewer - greenfill	\$/lot	0.00	-100.0%	n/a-	n/a-	n/a-	n/a-
Sewer - infill	\$/lot	0.00	-100.0%	n/a-	n/a-	n/a-	n/a-
Water by Agreement – customers not in declared service area							
Untreated Water, service charge (70 per cent of water tariff service charge)	\$/year	108.20	-11.6%	-3.4%	-3.7%	-4.3%	-5.2%
Untreated water - volume charge (70 per cent of water volume charge)	\$/kL	1.3438	-16.6%	3.0%	2.9%	2.8%	2.8%
Treated Water, service charge (85 per cent of water tariff service charge)	\$/year	131.39	-11.6%	-3.4%	-3.7%	-4.3%	-5.2%
Treated water - volume charge (parity with water volume charge)	\$/kL	1.9198	-11.6%	3.0%	2.9%	2.9%	2.8%
Miscellaneous fees and charges							
Information Statement	\$/item	26.16	3.6%	0.0%	0.0%	0.0%	0.0%
Sewer Application Fee - New	\$/item	104.32	17.6%	0.0%	0.0%	0.0%	0.0%
Sewer Application Fee - Alteration and repair	\$/item	96.52	46.7%	0.0%	0.0%	0.0%	0.0%
Tenant meter reading	\$/item	28.64	-0.2%	0.0%	0.0%	0.0%	0.0%
Special meter reading	\$/item	13.75	2.3%	0.0%	0.0%	0.0%	0.0%
Supply of Meter & Assembly (recycled) in a Dual Pipe area	\$/item	305.16	10.0%	0.0%	0.0%	0.0%	0.0%
Metered Hydrant Yearly service charge - FHYW	\$/item	1132.55	103.3%	0.0%	0.0%	0.0%	0.0%
Portable Metered Hydrant Security deposit 65mm - FHLB	\$/item	470.80	7.0%	0.0%	0.0%	0.0%	0.0%
Portable Metered Hydrant security deposit 25mm - FHSB	\$/year	195.92	18.8%	0.0%	0.0%	0.0%	0.0%
Installation of Recycled meter in Dual Pipe area	\$/item	236.41	0.0%	0.0%	0.0%	0.0%	0.0%
Supply of Meter & Assembly (potable) in Dual Pipe area	\$/year	252.30	-2.0%	0.0%	0.0%	0.0%	0.0%
Installation of Potable meter in Dual Pipe area	\$/item	214.07	-9.5%	0.0%	0.0%	0.0%	0.0%
Mandatory inspection of Dual pipe recycled water residential	\$/item	146.59	3.2%	0.0%	0.0%	0.0%	0.0%