

Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and Busselton Water

Busselton Water's Response to the Issues Paper

Introduction

Busselton Water is an independent water authority that supplies water to domestic, commercial, light industrial and special rural customers within the town of Busselton and its environs. We have a long and proud history within the community and are continually planning and monitoring our activities in order to focus resources and effort towards a good foundation for future prosperity and growth.

The culture for Busselton Water is in its pursuit of excellence in every endeavour. We continue today, as we were 100 years ago, to be guided by the core values established initially by staff and Board members and built upon over the history of our business.

The core values of fairness, recognition of service, commitment to tasks, and the rewarding of effort remain today and are underpinning factors in all of our actions and planning for the future. We supply in excess of 20,000 customers within the Busselton town site and close environs such as Port Geographe, Siesta Park, Vasse and Wonnerup. During weekends and holiday periods this can rise many fold.

Busselton's water supply differs from most other sources in Australia because of the deep artesian aquifers (Leederville and Yarragadee) that offer high microbiological integrity and very low organic carbon loadings. This means that Busselton's water supply is of the highest quality. From bores, the water is aerated and filtered to remove iron before it is stored in tanks at its operating plants and then pumped through approximately 298 kilometres of mains.

Busselton Water has access to a reliable, high quality water resource and is supported well by modern treatment plants, storage facilities and network capability.

Our submission

This submission represents Busselton Water's response to the Issues Paper for the Economic Regulation Authority's (ERA's) *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board* (the Inquiry). In the submission, we respond in turn to each of the questions raised by the ERA that are directly relevant to Busselton Water and its customers.

We would welcome the opportunity to meet with the ERA to discuss individual questions in more detail prior to the development of the ERA's Draft Report.

Service Standards

Question 1: Do you have sufficient resources to meet the service and performance standards set out in your operating licences?

Schedule 4 of Busselton Water's Operating Licence sets out a number of specific service and performance standards for the organisation including:

- emergency response times;
- customer complaint resolution;
- pressure and flow standards;
- continuity of supply; and
- drought response standards.

In addition to these standards, the operating licence sets out conditions for:

- customer consultation processes;
- the establishment of a customer service charter;
- the establishment of a Memorandum of Understanding with the Department of Health;
- accounting records;
- operational audits;
- an asset management system;
- reporting and provision of information requirements.

In August 2011, an *Operating Licence Audit and Asset Management* review was undertaken by Cardno in accordance with the requirements of the Operating Licence. The audit found that Busselton Water complied with their licence obligations, with the exception of finalising a Memorandum of Understanding (MoU) with the Department of Health. In October 2011, Busselton Water and the Department of Health finalised the MoU, thereby completing full compliance against the Operating Licence.

While adequate resources have been available to meet licence conditions in the past, a number of cost drivers including growth in demand and increasing drinking water quality requirements will require additional resourcing in the future. The resource requirements are outlined in the operating and capital expenditure sections below.

Service Providers' Tariff Proposals

Question 3: Please provide your own proposed revenue requirement and associated tariffs for the period from 1 July 2013 to 30 June 2016, and justification for that revenue and tariffs?

Busselton Water has determined future revenue requirements and tariffs based on a review of the key drivers of demand and expenditure. A description of expenditure requirements is provided under the 'Capital Expenditure', 'Operating Expenditure', 'Demand' and 'Inflation' sections later in this submission.

Busselton Water has determined the total regulatory building block costs each year, comprising of operating expenditure, depreciation and a return on assets. In accordance with the recommendations of the Authority's 2009 inquiry, the depreciation and return on assets are based on a regulatory asset base rather than Busselton Water's significantly higher statutory asset base.¹

Busselton Water's proposed tariffs have been determined to ensure the present value of total revenue exactly equals the present value of the cost of service for the period 1 July 2009 to 30 June 2023. This period includes both:

- the current regulatory period (1 July 2009 to 30 June 2013), which will account for any over- or under-recovery of revenue for the current regulatory period; and
- 10 years from the beginning of the next regulatory period (1 July 2013 to 30 June 2023). Including the next 10 years allows prices to be smoothed to avoid any significant price shocks from one year to the next.

Proposed revenue requirements and the forecast cost of service for the period 1 July 2013 to 30 June 2016 are shown in Table 1. The table demonstrates that the total revenue for each year remains below the cost of service because, as with the last inquiry, the revenue increase has been smoothed over a 10 year period. Busselton Water is satisfied that a process of smoothing over 10 years remains appropriate for the next regulatory period, however It is proposed that any 'smoothing' applied in the next inquiry should not extend beyond 30 June 2023.

Table 1: Proposed revenue requirement for Busselton Water

Cost of Service (\$'000 2011/12)	2013/14	2014/15	2015/16
Operating expenditure	4,638.4	4,897.2	4,917.2
Return of Assets	1,781.7	1,910.8	1,934.2
Depreciation	1,050.6	1,198.9	1,089.8
Cost of Service	7,470.7	8,006.9	7,941.3
Revenue (\$'000 2011/12)	2013/14	2014/15	2015/16
Tariff Revenue	6,459.9	6,715.3	6,983.1
Senior's Tariff Discount	-307.7	-317.1	-327.0
Senior's Tariff Rebate	16.9	17.7	18.6
Other Revenue	744.6	937.1	786.4
Total Gross Revenue	6,913.7	7,353.1	7,461.1

Based on the revenue requirements outlined above, Busselton Water has determined the customer charges that would be required if all tariffs were increased uniformly. On this basis, Table 2 provides the proposed tariffs for Busselton Water customers from 1 June 2013 to 30

¹ Busselton Water has applied the Initial Capital Base as determined by the Authority for 2008, rolled forward based on actual expenditure (and corresponding depreciation) since that time.

June 2016. Note that all tariffs are in current year dollars and will be escalated by the Consumer Price Index (CPI) each year.

Table 2: Proposed tariffs for Busselton Water customers (\$ 2011/12)

Service Charges (\$ 2011/12)			
	2013/14	2014/15	2015/16
Residential			
Residential	163.00	168.44	174.07
Non Residential by meter size			
20 mm	163.00	168.44	174.07
25 mm	254.69	263.19	271.98
40 mm	652.01	673.77	696.26
50 mm			
	1,018.77	1,052.77	1,087.91
80 mm			
	2,608.04	2,695.09	2,785.05
100 mm			
	4,075.07	4,211.09	4,351.64
150 mm			
	9,168.91	9,474.94	9,791.19
Other			
Vacant and (with supply)	163.00	168.44	174.07
Residential Fire Services	163.00	168.44	174.07
Non-Residential Fire Services	163.00	168.44	174.07

Volumetric tariff (\$/kL 2011/12)			
	2013/14	2014/15	2015/16
Residential			
0 - 150 kL	0.814	0.841	0.869
151 - 350 kL	1.139	1.177	1.216
351 - 500 kL	1.286	1.329	1.373
501 - 700 kL	1.716	1.773	1.832
701 - 1000 kL	2.395	2.475	2.557
Over 1000 kL	2.395	2.475	2.557
Non Residential	1.286	1.329	1.373

Demand Projections

Question 4: Please provide your demand projections for each of your services including the analysis for why you think these projections are robust.

Demand for new water services has fallen significantly over the past several years. Previous predictions of between 400 and 600 new services are no longer considered realistic.

However, a number of specific new developments are currently taking place and are expected to be released gradually over time, in particular Provence and Vasse Newtown, and in the further future will be other developments including East Ambergate and Port Geographe extensions. Based on planned developments in the region, Busselton Water has projected 150 new residential customers per year from 2013 until 2016, 200 from 2017 until 2019, and then 250 thereafter. We have also forecast between 8 and 12 new non-residential services per year.

In addition, it has been assumed that all new residential customers will consume 200 kilolitres per year as most new developments are of smaller block size. The lower demand for new services is demonstrated by the fact Busselton Water has had decreasing water volumes despite a small increase in the number of new services.

In addition to demand for conventional services, additional water will be provided to the Water Corporation for supply to Dunsborough. This increase in water delivered is not reflected in the number of services or volume supplied to customers on standard tariffs, as the revenue for this service will be recovered separately through a Bulk Water Supply Agreement.

Demand projections are shown in Table 3.

Table 3: Busselton Water demand projections

Year ending 30 June	2012	2013	2014	2015	2016
Service numbers					
Residential	10,394	10,544	10,694	10,844	10,994
Vacant Land	1,308	1,300	1,300	1,300	1,300
Non-residential	890	905	915	923	933
Non-residential fire services	174	174	174	174	174
Residential fire services	11	11	11	11	11
Service charge exempt	8	8	8	8	8
Volume					
Total Residential Volume (kL)	2,838,155	2,882,780	2,914,605	2,944,605	2,974,605
Total Non-Residential Volume (kL)	807,388	820,995	830,067	837,324	846,396

Capital Expenditure

Question 5: Please provide your capital expenditure proposals including the analysis for why you think these proposals are appropriate.

Busselton Water has a number of major capital works initiatives required in coming years. In addition to routine replacement and maintenance, key infrastructure items will include:

- **New Trunk Mains:** Several projects are needed to eliminate “single supply” scenarios from within the network.
- **Upgrade Existing Mains:** Continued program of replacement of older asbestos cement (AC) pipes within the network.

- **New/augmented infrastructure:** Based on an integrated asset management system, Busselton Water considers its capital needs based on considerations such as growth in the district and asset risks.
- **Buildings Operations:** A pump house and control room facility will be required at Ambergate.
- **Administration building:** Busselton Water has budgeted for the design and construction of a co-located administration operations facility. These works are expected to be completed by 2014/2015.
- **New Service Connection:** Based on the growth in customers, Busselton Water allows for the capital cost of new water services each year.
- **Meter Replacements:** A total retrofit of new radio frequency meters between 2010 and 2012 has meant that previously expected meter replacements will not be required until 2015/2016.

Busselton Water's proposed capital expenditure budget is provided in Table 4.

Table 4: Capital expenditure for the period 2012/13 to 2015/16

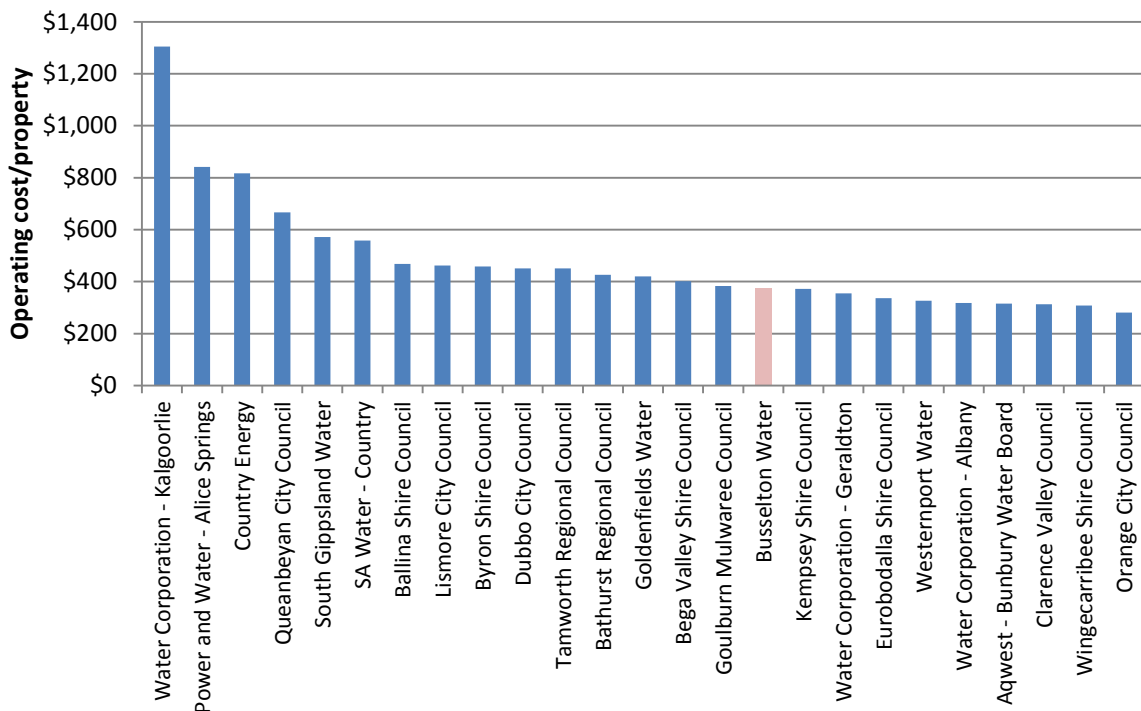
	2012/13	2013/14	2014/15	2015/16
Capital expenditure (\$ '000)	3,762	5,098	3,053	1,996

Operating Expenditure

Question 7: Please provide your operating expenditure efficiency targets, if you consider such a target would be appropriate; if not, please provide measures you intend to put in place to achieve efficiency gains.

Busselton Water has always been amongst Australia's leading organisations in providing a low operating cost per property. Figure 1 demonstrates Busselton Water's relative costs compared with other Australian utilities serving between 10,000 and 20,000 properties.

Figure 1: Operating cost per property for utilities serving 10,000 to 20,000 properties

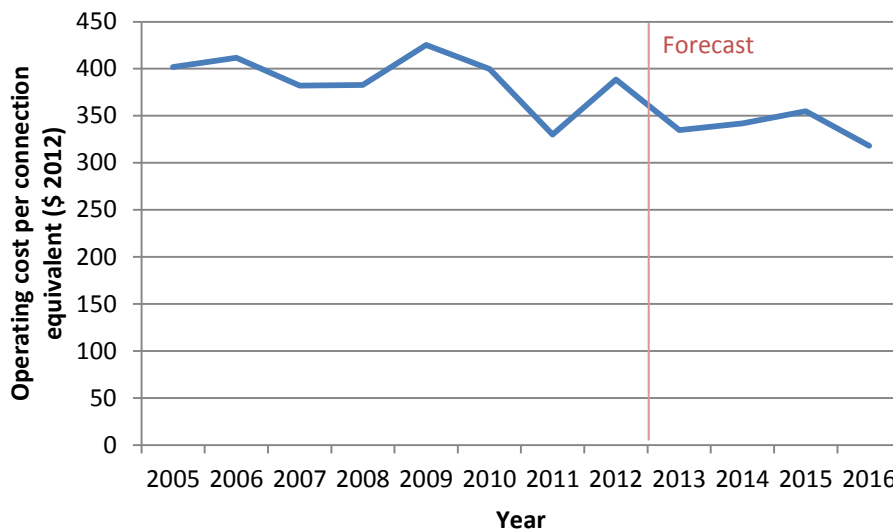


Source: National Water Commission, National Performance Report 2009-10 - Urban water utilities

In addition, Busselton Water's real operating cost per connection equivalent² has reduced over time from \$402 per connection in 2005 to a forecast of \$318 per connection equivalent in 2016 (both in 2012 dollars). The reduction in unit costs has come despite increased cost pressures including increasing water production and administrative costs. A particularly significant cost has been additional treatment and reporting costs associated with meeting increased water quality requirements. Disinfection of the water supply was previously undertaken with ultra-violet (UV) irradiation and spot chlorination as required, however Busselton Water has now implemented full-time chlorination to assure the quality of its drinking water supply.

² Connection equivalents include an allowance for the Dunsborough bulk water agreement based on the 2009/10 peak daily demand per service of 1.86 kL/d.

Figure 2: Operating expenditure per connection



In the Authority’s last inquiry, Halcrow Pacific was commissioned to review Busselton Water’s operating costs. Halcrow concluded that it would be inappropriate to set a defined operating efficiency target for Busselton Water due to the limited opportunities for economies of scale. Busselton Water agrees with this assessment, and in this regard strives to both maximise the efficiency of its existing services and to seek new business opportunities (such as the Dunsborough bulk water supply) to improve economies of scale for the benefit of all customers.

Efficiency of Demand Management Activities

Question 9: What demand management activities are you intending to undertake over the review period; please justify why you think this expenditure is efficient.

In recent years, Busselton Water’s two key demand management activities have been its Community Engagement Program and the radio frequency retrofit project.

The Community Engagement Program focuses on the attainment of excellence in the supply, management and sustainability of water services, through community education and building community relationships. It also seeks to highlight the value set which Busselton Water aspires to and further seeks to emphasise the strong community alignment of Busselton Water. Through this program, we provide support which encourages the adoption of good water conservation practices and promotes innovative. We fund proposals from schools and organisations/groups that can demonstrate their proposal has a direct community benefit and that it supports the vision, values and goals of Busselton Water including growth and sustainability of water through education, promoting responsible use and the conservation of water. The efficiency of this program lies in significant benefits it provides for both the water supply system and the community for a relatively low investment.

The now complete radio frequency retrofit project provides an opportunity to expand services to customers through the future development of a fixed communications network. Such a

network can provide an increased frequency of data collection that will improve the management, monitoring and control of the water supply as well as enabling expanded service opportunities. The new meters are already proving to have substantial benefits in terms of leak detection, backflow alarms and community praise.

Rate of Return

Question 12: What rate of return are you proposing to use in the calculation of your revenue requirement?

Busselton Water proposes a real pre-tax rate of return of 6.3% for the calculation of revenue requirements.

The proposed rate of return is based on the Weighted Average Cost of Capital, determined using the parameters applied by the Authority during the 2009 pricing inquiry, updated for:

- a risk free rate of 4.06% based on the average 10 Year Australian Government Bond rate for the 20 trading days prior to 17 March 2012;
- an inflation forecast of 2.6% based on the geometric average of the three years inflation forecast in the RBA's Statement on Monetary Policy (February 2012) and a further 7 years at the mid-point of the RBA's long term target range of 2-3% (we note that this is the standard methodology employed by the Authority and is not Busselton Water's forecast rate for inflating operating or capital expenditure);
- Busselton Water was informed by Authority staff that a recent internal review indicated that the appropriate franking credit rate would be 25% rather than the previous rate of 65%.

For completeness, the full set of WACC parameters is shown in Table 5.

Table 5: Proposed WACC parameters

Parameter	Value
Nominal Risk Free Rate (Rfn)	4.06%
Real Risk Free Rate (Rfr)	1.52%
Inflation Rate (I)	2.60%
Debt Proportion (D)	40.0%
Equity Proportion (E)	60.0%
Debt Risk Premium (Drp) (BBB+)	2.80%
Debt Issuing Cost (Disc)	0.125%
Risk Margin (DRm)	2.925%
Australian Market Risk Premium (Rp)	6.00%
Equity Beta (Be)	0.65
Corporate Tax Rate (T)	30%
Franking Credit (g)	25%
Real Pre Tax WACC (WPr)	6.30%

The Authority noted in the Issues Paper that an alternative methodology for revenue calculation might potentially be employed using a post-tax rate of return. As the timing prevented a detailed consideration of the implications of using a post-tax WACC, Busselton Water would appreciate the opportunity to further discuss this issue with the Authority prior to the finalisation of the Draft Report.

Inflation

Question 15: Please provide your inflation projection as well as the reasons for why you have adopted your proposed inflation measure.

The Consumer Price Index (CPI) all groups Perth, is used in Busselton Water's financial planning to reflect the increase in operating and capital costs and certain revenues. Based on historic trends (see below) it is anticipated that the rate of increase will continue around the 3.0% mark and this rate has been adopted as the base line CPI incremental factor throughout Busselton Water's financial planning.

Period	CPI increase
2007-2008	3.6%
2008-2009	3.0%
2009-2010	2.5%
2010-2011	2.9%

Carbon Price

Question 17: Please provide your carbon cost projections as well as the reasons for why you have adopted these projections.

Busselton Water has reviewed the anticipated impact of a carbon price on energy costs. Based on the Department of Treasury's *Preliminary Assessment of the Impact of the Proposed Carbon Tax on Western Australia* (August 2011), electricity charges are forecast to increase around 7%. On this basis, Busselton Water's electricity charges will increase by around \$42,000 per year.