

Final Report: Inquiry on Water Corporation's Tariffs

7 May 2007

Economic Regulation Authority



WESTERN AUSTRALIA

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Foreword

The Western Australian Government has requested the Economic Regulation Authority (**Authority**) to conduct an annual inquiry into the Water Corporation's tariffs as input into the Government's 2007 Budget deliberations. The Terms of Reference provide that:

While a major review of tariffs is envisaged, perhaps once every three years, the annual reviews under these Terms of Reference would be more limited and may focus on particular issues of relevance at the time.

Accordingly, this is not a major review, which is envisaged to occur once every three years, but is limited to advice in relation to the Corporation's annual Budget submission to the Department of Treasury and Finance.

The Authority's advice incorporates decisions made by the Government in response to the Authority's recommendations in the Inquiry on Urban Water and Wastewater Pricing (completed on 4 November 2005) and Inquiry on Country Water and Wastewater Pricing (completed on 23 June 2006).

The Authority's role in this inquiry is provided for in the *Economic Regulation Authority Act 2003* and is also consistent with the Government's commitment to implement the National Water Initiative, which requires an independent regulator to either set or review water prices.

The Authority is pleased to undertake this role in Western Australia and has provided a set of recommendations in this report that reflects the Authority's assessment of the Budget submission by the Corporation.

LYNDON ROWE
CHAIRMAN

Recommendations

- 1) The Corporation's tariffs should be escalated by the annual percentage change in the eight city average Consumer Price Index as determined by the Australian Bureau of Statistics for the December quarter 2006 rather than the annual percentage change in the Perth Consumer Price Index for the September quarter 2006. The implication is that tariffs would be escalated in 2007/08 by 3.3 per cent rather than 4.8 per cent.
- 2) The Authority considers that the Corporation's water source planning assumptions (assuming the average inflows of the last six years will continue and targeting a 1 in 200 year reliability) may be overly conservative. However, given the considerable climate uncertainty, the Authority considers the need to allow for \$250 million per year of capital expenditure on water source development over the period 2008/09 to 2010/11 to be reasonable.
- 3) Tariff increases associated with the increase in capital expenditure should be phased-in to minimise the impact of sudden increases in prices on consumers, rather than be "front-loaded" as proposed by the Corporation.
- 4) Tariff increases for a particular service should relate as accurately as possible to the costs of delivering that service, rather than be spread across unrelated services, as occurs under the Corporation's proposal.
- 5) The productivity rate targeted by the Corporation is consistent with the Government's decision in the 2006 Budget. For the purpose of this report, the Authority has accepted the Corporation's operating expenditure.
- 6) Although the most recent estimates of Long Run Marginal Cost (LRMC) provided by the Corporation have increased by approximately \$0.15 per kL, the upward revision is driven by capital cost pressures that are unlikely to persist over the longer term. The Authority considers that it is appropriate to continue to use the LRMC calculations that were estimated as part of the Inquiry on Urban Water and Wastewater Pricing until the next major review.

1 Introduction

On 21 February 2007 the Treasurer of Western Australia gave written notice to the Economic Regulation Authority (**Authority**) to undertake an inquiry into the Water Corporation's (**Corporation**) residential and non-residential tariffs.

1.1 Terms of Reference

This inquiry has been referred to the Authority under Section 32 of the *Economic Regulation Act 2003* (**Act**), which provides for the Treasurer to refer to the Authority inquiries on matters related to regulated industries (i.e. water, gas, electricity and rail industries).

The Terms of Reference are provided in Appendix 1.

In accordance with the Terms of Reference, the Authority will make recommendations on the most appropriate level of tariffs for the Corporation's customers. More specifically, the Authority is to investigate and report on the following matters:

- Based on the Corporation's fees and charges submission to Government, the Authority is to provide advice on an annual basis, on the appropriate tariff levels for the Water Corporation's services (residential and non residential).
- The impact on the Water Corporation's customers associated with the recommended tariff levels.
- The impact on the State Government's net financial position associated with the recommended tariff levels.

In examining the Corporation's tariffs, the Authority is required by the Terms of Reference to have regard to the Government's social, economic and environmental policy objectives.

In undertaking the inquiry, the Authority recognises section 26 of the Act, which requires the Authority to have regard to:

- the need to promote regulatory outcomes that are in the public interest;
- the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in relevant markets;
- the legitimate business interests of investors and service providers in relevant markets;
- the need to promote competitive and fair market conduct;
- the need to prevent abuse of monopoly or market power; and
- the need to promote transparent decision making processes that involve public consultation.

1.2 Background to the Inquiry

This inquiry follows previous investigations by the Authority, at the request of the Western Australian Government, into the Corporation's pricing in the metropolitan and country areas of Western Australian. On 4 November 2005, the Authority provided the Final Report of the Inquiry on Urban Water and Wastewater Pricing to the Treasurer, and on 23 June 2006, the Authority provided the Final Report of the Inquiry on Country Water and Wastewater Pricing to the Treasurer. Both reports were subsequently tabled in the Western Australian Parliament and are available on the Authority's web site.

The role of the Authority in providing advice to the Western Australian Government on water pricing is provided for in the *Economic Regulation Authority Act 2003* and is consistent with the Intergovernmental Agreement on a National Water Initiative, which was signed by the Premier of Western Australian on 6 April 2006.

This annual inquiry is not intended to be a comprehensive reassessment of the Corporation's pricing, but rather an update that takes into account information that has come to hand since the Authority last reported to Government on these matters. The Terms of Reference indicate that a comprehensive assessment of the Corporation's pricing could be undertaken perhaps once every three years.

It is expected that this inquiry will assist the Government with its annual deliberations for Water Corporation's water and wastewater tariffs. It should be noted that the Government made a number of decisions on urban water and wastewater pricing as part of the 2006 Budget that carry over to the 2007 Budget, such as:

- Prices would increase gradually over a period of eight years to accommodate increases in the Corporation's capital expenditure, in particular the Kwinana Seawater Desalination Plant.
- Water usage charges would gradually move towards the estimate of long run marginal cost, which is the marginal cost of future water sources, over the eight year period (and at the same time, the fixed charge would be decreased to maintain revenue neutrality).
- The number of steps in the water tariff schedules (both residential and non-residential) would be reduced over time.
- The Corporation would achieve a mid-point efficiency target of 2 per cent (based on the Corporation's calculation methodology or 0.8 per cent based on the Authority's methodology¹).

In addition, the Government has made a number of decisions as part of the 2007 Budget on country water and wastewater pricing, such as:

- Lowering the uniform pricing threshold to 300 kilolitres (**kL**) per household per year for towns in Group A (generally towns in the south of the State) and 500 kL per household per year in Group B (towns in the north). The current thresholds are 350 kL and 550 kL respectively;

¹ The Authority uses the change in operating expenditure per customer, expressed in real terms. The Corporation uses the change in total operating expenditure after adjustments have been made for the level of service, expressed in nominal terms.

- Within the climate categories (Group A and Group B), grouping towns into five classes according to their direct cost of service provision with an even spread of towns per class;
- For residential water pricing, setting an inclining tariff structure for each class with usage charges increasing in four tiers (the first tier is set at the Perth rate, the second tier is set in relation to direct operating costs plus an allowance for the estimated future capital expenditure, the third tier is set in relation to the total costs less indirect overheads, and the fourth tier is set in relation to total costs);
- Cap residential water prices at \$2.50 per kL in the second tier and \$5.00 per kL in the third and fourth tiers; and
- Phase-in the reforms over the period to 2013/14.

Further information on the Authority's previous inquiries is available on the Authority's web site.

1.3 Review Process

The Authority has received the Corporation's submission on fees and charges from the Department of Treasury and Finance and has analysed the tariff increases being sought by the Corporation with the aid of the Authority's financial model of the Corporation's tariffs.

The Draft Report was provided to the Treasurer on 1 March 2007. Following the receipt of the Draft Report, the Government made decisions on the recommendations contained in the Authority's previous Inquiry on Country Water and Wastewater Pricing, and these decisions have been incorporated into this report. The Government also reviewed the impact of the Corporation's capital expenditure proposals on the Government's net debt position and as a result required the Corporation to provide a revised capital expenditure programme to the Authority for incorporation into this report.

In accordance with the Act, the Treasurer will have 28 days, from the date of receipt of this report, to table the report in Parliament.

In accordance with section 45 of the Act, the Authority has acted through the Chairman in conducting this inquiry.

2 Summary of Corporation Fees and Charges Submission

The Corporation is seeking average price increases for its water services amounting to 12.6 per cent in 2007/08, 8.9 per cent in 2008/09 and 4.3 per cent for the three years thereafter. The equivalent price increases for the Corporation's wastewater and drainage services are 10.8 per cent, 7.2 per cent and 2.7 per cent respectively.

The tariff increases are based on:

- an adjustment for inflation of 4.8 per cent in 2007/08 which is the figure provided by the Department of Treasury and Finance for allowable price increases for government services;
- specific increases in 2007/08 and 2008/09 to all of its services to partly fund up-front the costs associated with the Corporation's capital expenditure on the pipeline from the South West Yarragadee (and integration into the network), augmentation of wastewater treatment plants and other capital projects; and
- the continuation of tariff reforms previously approved by the Government, including the recovery of the costs associated with the desalination plant.

The Corporation's submission also includes the impacts of its proposed tariff increases on customers.

- The increase in the total water, wastewater and drainage bill for an average metropolitan residential customer consuming 300 kL amounts to just over \$100 in 2007/08 (half of the increase is for inflation) resulting in an expected annual bill of approximately \$968.

Following the Draft Report, the Government required the Corporation to reduce its capital expenditure programme by \$300 million due to potential impacts on the Government's net debt position. The Corporation's tariff proposals, as presented above, are therefore overstated.

3 Issues

3.1 Tariff Escalation for Inflation

As one element of its proposed increase in tariffs, the Corporation is seeking an across-the-board increase in 2007/08 of 4.8 per cent, which is the inflation rate that has been provided by the Department of Treasury and Finance for the purpose of increasing the price of government services in the 2007 Budget. The inflation rate is the annual increase in the Perth Consumer Price Index (CPI) for the September 2006 quarter.

More generally, the approach to annual tariff escalation is to use the most recent annual increase in the eight city average CPI². The main reason for using an Australia-wide index is that Australia-wide inflationary expectations are built into the domestic capital markets and therefore the rate of return that is applied to determine an appropriate revenue requirement. It would be inconsistent to set the revenue requirement for a utility on the basis of one inflation measure but allow the utility to escalate its tariffs on the basis of a different inflation measure. Further, such an approach could result in a period when the utility earns revenue that exceeds its costs (although it would be expected that over time the two inflation measures would converge).

Applying the standard regulatory approach to tariff escalation to the Corporation could place the Corporation under greater pressure to make productivity gains during times when the eight city average CPI is increasing at a lesser rate than the Perth CPI, which is the situation at present. However, the Perth CPI has been significantly impacted by increases in housing costs, which is unrelated to the Corporation's cost drivers. If housing is excluded from the Perth CPI, the annual increase for the September 2006 quarter is reduced from 4.8 per cent to 3.7 per cent. In comparison, the latest estimate of the increase in the eight city average CPI is 3.3 per cent.

A further reason why the Authority considers that it is not appropriate to base the cost escalation increase on local factors is that two thirds of the Corporation's costs relate to its return on assets, and is a cost influenced by financial markets and depreciation, which is the recovery of capital expenditure sourced more broadly than from the local market.

Overall, the Authority recommends that the Corporation's tariffs be inflated in 2007/08 by the latest estimate of the eight city average CPI. That is, the annual change in the eight city average calculated using the 2006 December quarter CPI statistics as determined by the Australian Bureau of Statistics.

² The use of the eight city average is consistent with approaches adopted by regulators in other jurisdictions such as the Independent Pricing and Regulatory Tribunal in New South Wales, the Independent Competition and Regulatory Commission in the Australian Capital Territory and the Essential Services Commission in Victoria.

Recommendation

- 1) The Corporation's tariffs should be escalated by the annual percentage change in the eight city average Consumer Price Index as determined by the Australian Bureau of Statistics for the December quarter 2006 rather than the annual percentage change in the Perth Consumer Price Index for the September quarter 2006. The implication is that tariffs would be escalated in 2007/08 by 3.3 per cent rather than 4.8 per cent.

3.2 Capital Expenditure

Additional to the increase being sought to compensate for increases in inflation, the Corporation sought, in its submission to the Department of Treasury and Finance, an increase in tariffs of 5.7 per cent in 2007/08 and 4.6 per cent in 2008/09 to partly fund a \$1.5 billion increase in capital expenditure over the period 2007/08 to 2011/12 (in nominal dollars).

The increase in capital expenditure is largely associated with the project to pipe water to the metropolitan area from the South West Yarragadee (an additional \$703 million in nominal dollars) and wastewater projects at Alkimos, Beenyup, East Rockingham and Woodman Point (\$311 million in nominal dollars). The other significant cause for an increase in capital expenditure is the escalation of capital costs (\$284 million in nominal dollars over the period 2007/08 to 2011/12) for projects other than the new projects being proposed by the Corporation.

Relatively smaller projects include the Hopetoun/Ravensthorpe town water supply, integration assets associated with the Harvey trade, Gngangara Mound Replenishment Trial³, Kwinana Water Reclamation Plant Stage 2 and Boddington town water supply and wastewater schemes. In total, these smaller projects amount to \$84 million (in nominal dollars over the period 2007/08 to 2011/12).

As indicated above, following the Draft Report, the Government required the Corporation to reduce its capital expenditure programme by \$300 million due to potential impacts on the Government's net debt position. According to the Corporation:

The reduction in the Capital Investment Programme was done on the basis of a considered risk assessment of the scheduled projects. After both risk and project construction reviews were completed the focus was directed towards projects in future years, ranging across all lines of business, in both country and metro regions⁴.

In relation to the Corporation's capital expenditure programme, the Authority has considered the timing of the South West Yarragadee project, the timing of any tariff increases, and the proposal to spread the tariff increases across all services. The Authority has not reviewed the necessity of the wastewater projects and smaller capital projects.

³ The amount of capital expenditure on the Gngangara Mound Replenishment Trial that is to be recovered from customers would exclude any amount that is funded by the Federal Government.

⁴ Email from the Corporation, 3 May 2007.

South West Yarragadee

Subject to approval by the Environmental Protection Authority, the Corporation is seeking to have the pipeline from the South West Yarragadee operational by 2009/10. The Authority's main concern in relation to the South West Yarragadee project is that the project is operational at the appropriate time.

The Authority is aware of the simulation modelling undertaken by the Corporation to guide the timing of the project. The Corporation's modelling indicates that deferring the project increases the probability of a total sprinkler ban from almost zero in 2009/10 to 7.7 per cent (1 in 13 years). The most significant assumption in the modelling is that inflows into the dam storages will continue at the same rate as has occurred over the last six years. If this assumption is relaxed so that the average inflow of the last ten years occurs, the probability of a total sprinkler ban in 2009/10, without the pipeline from the South West Yarragadee, is reduced to 1.8 per cent (1 in 56 years).

The Corporation has indicated that even if the average inflow of the last ten years is assumed, it is still necessary to proceed with the project as soon as possible to reduce the probability of a total sprinkler ban in 2009/10 to below 0.5 per cent (1 in 200 years), which is the Corporation's target level of reliability.

The Authority's previous advice to the Government, as part of the Inquiry on Urban Water and Wastewater Pricing, was that a 1 in 200 year target level of reliability may be imposing too great a cost on water customers through either the early development of new water sources or the continuation of existing water restrictions. Rather, the Authority indicated that a 1 in 50 year target level of reliability may be more appropriate.

Based on the Corporation's simulation modelling, the 1 in 50 year target level of reliability is not breached for at least the next three years if the pipeline project does not proceed, assuming the average inflow of the last ten years continues.

In establishing the appropriate timing of the project, the benefits of reducing the risk of a total sprinkler ban need to be weighed against the financial benefits of deferring the project. The Authority estimates that the present value of the capital expenditure on South West Yarragadee is reduced by between \$35 and \$40 million for each year the project is delayed, which means that there is a financial benefit to consumers associated with deferring the project (approximately \$10 per household for each year the project is deferred). In the event that the project is not needed, a household's water bill would end up being approximately \$57 per year lower than otherwise (in dollar values of 2006/07).

Overall, the Authority considers that the Corporation's water source planning assumptions are conservative, both in relation to the use of the last six years of inflow data, and the use of a 1 in 200 year risk of a total sprinkler ban. However, given the considerable climate uncertainty, the Authority accepted in the Draft Report the Corporation's proposal to have the pipeline from the South West Yarragadee operational by 2009/10.

Since the Draft Report, the Government requested the Corporation to revise its capital expenditure proposal to the Authority. The revised capital expenditure programme does not include South West Yarragadee but allows for \$250 million per year of capital expenditure on water source development over the period 2008/09 to 2010/11. The Authority has incorporated the revised capital expenditure proposal into its recommendations.

As part of the Draft Report, the Authority considered the option of deferring the decision to construct the pipeline until one more year of inflow data is available (i.e. post winter 2007). The impacts of this scenario are presented in Appendix 2.

Recommendation

- 2) The Authority considers that the Corporation's water source planning assumptions (assuming the average inflows of the last six years will continue and targeting a 1 in 200 year reliability) may be overly conservative. However, given the considerable climate uncertainty, the Authority considers the need to allow for \$250 million per year of capital expenditure on water source development over the period 2008/09 to 2010/11 to be reasonable.

Timing of tariff increases

The Corporation has stated in its submission that its proposed tariff increases will:

Assist in meeting the Government's target of constraining prices contained in the Household Model to below the Consumer Price Index (CPI) in future years. The alternative of a longer-term phase-in of price increases may not be able to be accommodated after 2008/09 when the freeze on electricity prices ends. (p3).

The Corporation does not provide further justification for the proposed timing of the tariff increases.

The Authority has previously advised (in the final report of the Inquiry on Urban Water and Wastewater Pricing) that the costs associated with the Corporation's capital works programme (and other costs) should be "smoothed" so that real increases in tariffs are spread over a ten year period. The Authority does not accept that it is either necessary or desirable to have step changes in water tariffs to reflect higher costs. Rather a smooth tariff path is likely to be more readily accepted by customers of services and still adequately provide for the recovery of costs.

A smooth tariff path is also more likely to be more consistent with the Government's policy of constraining price increases for government services to below increases in the CPI, at least for the next two years. Based on information provided by the Department of Treasury and Finance, the Corporation's charges are approximately 25 per cent of a typical household's expenditure on government services. If the tariffs for other government services were held constant, the Corporation's proposal for 2007/08 would cause the cost of government services in total to increase by more than inflation in that year⁵. The Authority's tariff proposals are consistent with the Government's policy if the tariffs of other government services increased by up to 1.5 per cent per annum for the next three years.

⁵ The inflation rate assumption used by the Department of Treasury and Finance for 2007/08 is 2.5 per cent.

Recommendation

- 3) **Tariff increases associated with the increase in capital expenditure should be phased-in to minimise the impact of sudden increases in prices on consumers, rather than be “front-loaded” as proposed by the Corporation.**

Service level cost recovery

The Corporation has proposed largely across-the-board tariff increases to fund the costs associated with the Corporation's increased capital expenditure programme.

As part of the Inquiry on Country Water and Wastewater Pricing, the Authority established a comprehensive approach to modelling the Corporation's tariffs which includes basing tariffs on the costs of each service (i.e. water, wastewater, drainage). The Authority recommends using this approach to tie an increase in costs for a particular service to an increase in tariffs for that service.

Under the Authority's proposal, the costs relating to each service are recovered from the customers of each service. Such a cost-based system would permit the Corporation to recover the cost of constructing assets for each service, to earn a commercial rate of return on the cost of assets for each service and to recover the efficient costs of operating and maintaining assets related to each service.

Ideally, the extent of cost-reflectivity would extend to the level of customer type (i.e. residential and non-residential) but the Corporation's information systems do not currently provide cost-based information at this level of detail. In the absence of this information, the Authority has assumed that the current relative average price difference between non-residential and residential customers is maintained.

In the Final Report of the Inquiry on Urban Water and Wastewater Pricing, the Authority recommended the water businesses further develop their information systems to support the introduction of cost-based systems to better establish the revenue requirements for future periods.

The Authority's proposal to have cost-based pricing is consistent with section 65 of the Intergovernmental Agreement on a National Water Initiative which requires Western Australian and other jurisdictions to set tariffs for water storage and delivery that “avoid monopoly rents”⁶. The issue with the Corporation's proposal is that costs that are unrelated to water storage and delivery are included in water tariffs when they should be included in the tariff of wastewater or other services.

The implications of accepting the Authority's proposals are significant:

⁶ Section 65 of the Intergovernmental Agreement on a National Water Initiative reads as follows: “In accordance with NCP commitments, the States and Territories agree to bring into effect pricing policies for water storage and delivery in rural and urban systems that facilitate efficient water use and trade in water entitlements, including through the use of: i) consumption based pricing; ii) full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities, where feasible and practical; and iii) consistency in pricing policies across sectors and jurisdictions where entitlements are able to be traded.”

- Under the Corporation's proposal, by 2011/12 the unit cost of water in the metropolitan area would be \$1.49 per kL (in real dollar values of 30 June 2006);
- If the Corporation applied service level cost recovery (assuming the same costs as under the Corporation's original proposal), by 2011/12 the unit cost of water in the metropolitan area would be \$1.36 per kL (in real dollar values of 30 June 2006)⁷;

It is therefore evident that the Corporation's proposal results in too much revenue being recovered from its water service. This approach is inconsistent with the National Water Initiative and also inconsistent with the efficient use of resources.

Recommendation

- 4) **Tariff increases for a particular service should relate as accurately as possible to the costs of delivering that service, rather than be spread across unrelated services, as occurs under the Corporation's proposal.**

3.3 Operating Efficiency

In the 2006 Budget the Government decided that the Corporation would achieve an annual efficiency target of either:

- 2.0 per cent based on the Corporation's calculation methodology, which is the change in total operating expenditure after adjustments have been made for the level of service, expressed in nominal terms; or
- 0.8 per cent based on the Authority's methodology, which is the change in operating expenditure per customer, expressed in real terms.

The Authority has confirmed that the Corporation's operating expenditure projection is consistent with the 2.0 per cent productivity target using the Corporation's measure. However, it is not consistent with the 0.8 per cent target using the Authority's measure. If a 0.8 per cent productivity target is applied to real operating expenditure per connection from 2005/06, the Corporation would need to reduce its operating expenditure by \$155 million in present value terms over the period 2007/08 to 2011/12 (in real dollar values of 30 June 2006).

The 2006 Budget decision was a mid-point between the Authority's recommendation as part of the Inquiry on Urban Water and Wastewater Pricing and the Corporation's recommendation. The Authority had advised in its Final Report that the productivity target be set at 1.25 per cent (using the Authority's approach). This rate was half the rate of efficiency gain that the Authority considered should be achievable by the Corporation after taking into account similar benchmarks for national and international water businesses.

For the purpose of this report, the Authority has accepted the Corporation's operating expenditure as being consistent with the Government's 2006 Budget decision. The Authority will reconsider the appropriate level of operating efficiency in the next major review.

⁷ Note that for the comparative purposes, the assumption here is that the South West Yarragadee project proceeds as proposed by the Corporation (i.e. it is operational by 2009/10 rather than deferred).

Recommendation

- 5) The productivity rate targeted by the Corporation is consistent with the Government's decision in the 2006 Budget. For the purpose of this report, the Authority has accepted the Corporation's operating expenditure.

3.4 Long Run Marginal Cost

The metropolitan usage charges that are being phased-in by 2013/14 reflect estimates of long run marginal cost (LRMC) at the time of the Inquiry on Urban Water and Wastewater Pricing (2005). LRMC reflects the change in the cost of future water sources and demand management options as a result of a change in demand⁸.

The LRMC reflects the marginal cost of supply compared to marginal changes in demand over periods extending as much as 100 years into the future. It is therefore inappropriate to compare LRMC with any one source option, as the LRMC calculation takes into account all future sources – both inexpensive and expensive – as well as the assets needed to integrate the source into the supply system.

A range of LRMC estimates is possible based on differing source development plans with differing assumptions about available water supply options and inflows to water storages. The target usage charge for consumption up to 550kL per year is currently \$0.85 per kL (in dollars of 2006/07) which is being phased-in by 2013/14 as per the Government's decision in the 2006 Budget. This estimate of LRMC assumes inflows to storages continue at the level of the eight years preceding June 2006 and further water trading opportunities become available. The target usage charge for consumption between 550kL per year and 950 kL per year (\$1.23 per kL in dollars of 2006/07) also assumes the same inflow assumption but is more conservative in terms of the availability of water from less expensive options.

The estimation of LRMC is a complex exercise that requires a system-wide analysis about the appropriate timing of alternative source development options. Discussions with the Corporation have indicated that a revised source development plan for the next 50 years may be available for the next major review, in which case a robust revised estimate of LRMC would be available. However, in response to a request from the Authority, the Corporation has updated its estimates of the costs of the projects included in the current source development plan.

The Corporation's latest assessment indicates that the LRMC has increased by approximately \$0.15 per kL. The increase in LRMC estimates is largely due to higher capital costs associated with the current booming economy. However, the LRMC calculation is based on the assumption that these higher capital costs will persist for the foreseeable future, which is likely to be a conservative assumption.

It should be noted that the increased costs associated with the South West Yarragadee pipeline and integration assets will not have a material impact on the LRMC calculations as it is not technically possible to bring forward that project before 2009/10 (in other

⁸ Note that the LRMC does not necessarily reflect the cost of the next source option, nor the average cost of all future water sources.

words, there is no marginal cost increase that influences the calculation of LRMC). However, the higher costs would be reflected in a higher fixed charge than otherwise.

The Authority does not consider it necessary at this stage to revise up the target usage charges to reflect the most recent estimates of LRMC for three reasons.

- First, the recent estimates of LRMC are likely to be overly conservative as the current pressures on capital costs are likely to diminish over time.
- Second, the current tariff that is being phased in for usage between 550 kL and 950 kL, which is \$1.23 per kL, is in the middle of the range of the most recent LRMC estimates. Also, the tariff that applies above 950 kL, which is currently \$1.59 per kL, is above the range of the most recent LRMC estimates.
- Third, it is probably appropriate to only adjust the usage charge targets following a comprehensive re-assessment of the Corporation's source development plan, which may coincide with the next major tariff review.

The Authority has, however, analysed the impacts of targeting tariffs that reflect the latest estimates of LRMC, which would be \$0.99 per kL (in dollars of 2006/07) for consumption below 550 kL per year and \$1.40 per kL (in dollars of 2006/07) for consumption between 550 kL and 950 kL per year. This information is provided in Appendix 3.

Recommendation

- 6) Although the most recent estimates of Long Run Marginal Cost (LRMC) provided by the Corporation have increased by approximately \$0.15 per kL, the upward revision is driven by capital cost pressures that are unlikely to persist over the longer term. The Authority considers that it is appropriate to continue to use the LRMC calculations that were estimated as part of the Inquiry on Urban Water and Wastewater Pricing until the next major review.

3.5 Other Assumptions

The Corporation has assumed that sprinkler restrictions will remain at their present level and per capita water usage will be maintained at 155 kL per person. As these assumptions are consistent with the Government's 2006 Budget decision, the Authority has also based its recommendations on these assumptions and will reassess the situation at the next major tariff review.

4 Recommended Tariffs

The Corporation's proposed five-year tariff path, as presented in their submission, is shown in the following table.

Table 4.1 Summary of Corporation's Proposed Tariff Increases (Based on the Corporation's Original Capital Expenditure Programme)

	2007/08	2008/09	2009/10	2010/11	2011/12
Annual Change in Consumer Price Index	4.8%	2.5%	2.5%	2.5%	2.5%
Specific price increases – water, wastewater and drainage (real)	5.7%	4.6%	0.2%	0.2%	0.2%
Price increase – wastewater and drainage (nominal)	10.8%	7.2%	2.7%	2.7%	2.7%
Additional price increases – water (real)	1.6%	1.6%	1.6%	1.6%	1.6%
Price increase – water (nominal)	12.6%	8.9%	4.3%	4.3%	4.3%

In comparison, the Authority's tariff path over the same period is shown in Table 4.2.

The differences between the Corporation's proposals and the Authority's proposals arise from five sources.

- First, the Authority's tariff path is based on a revised capital expenditure programme that is approximately \$300 million less than originally submitted by the Corporation.
- Second, there is a difference in the inflation assumption for 2007/08, with the Corporation using the Department of Treasury and Finance's recommended CPI increase and the Authority using the eight city average CPI increase. For the following years, the Authority is using the current projection underlying interest rate differentials, which is higher than the Corporation's forecast.
- Third, there is a difference in the timing of the tariff increases, with the Authority recommending the increases be smoothed while the Corporation is recommending larger initial increases and then smaller increases later.
- Fourth, there is a difference in the allocation of the tariff increases, with the Authority recommending the increases be tied to cost increases at the service level.

- Fifth, there is a difference in the total amount of revenue that needs to be generated to cover costs. The Authority estimates that the Corporation's proposal generates revenue of \$5,484 million in present value terms (real dollar values of 30 June 2006) over the period 2007/08 to 2011/12, while the Authority has estimated that the revenue need only be \$5,395 million over the same period. The difference is explained by the Authority's recommendation to have a smooth tariff path (rather than "front-load" the increase in tariffs as is proposed by the Corporation).

Table 4.2 Summary of Authority's Proposed Tariff Increases (Based on the Corporation's Revised Capital Expenditure Programme)⁹

	2007/08	2008/09	2009/10	2010/11	2011/12
Annual Change in Consumer Price Index	3.3%	3.1%	3.1%	3.1%	3.1%
Specific price increases – wastewater and drainage (real) ¹⁰	2.1%	2.1%	2.1%	2.1%	2.1%
Price increase – wastewater and drainage (nominal)	5.5%	5.2%	5.2%	5.2%	5.2%
Specific price increases – water (real) ¹¹	2.4%	2.4%	2.4%	2.3%	2.3%
Price increase – water (nominal)	5.8%	5.5%	5.5%	5.5%	5.4%

⁹ Note that the second row in this table refers to wastewater and drainage whereas the second row in Table 4.1 refers to water, wastewater and drainage. The total nominal price increase for water in Table 4.1 is therefore the increase that applies to wastewater and drainage as well as an additional increase specifically for water. In comparison, the total nominal price increase for water in Table 4.2 is the inflation rate plus the specific price increase for water.

¹⁰ Note that this is an average of the specific price paths for drainage and wastewater customers.

¹¹ Note that this is an average of the specific price paths for water customers.

The following table shows the difference between the Corporation's original submission and Authority proposals (incorporating the revised capital expenditure programme) for a selection of tariffs in nominal terms over the coming year. Complete listings of the Authority's proposed tariffs in nominal and real (2006/07 dollars) are contained in appendices 4 and 5.

Table 4.3 Comparison of the Corporation's and Authority's Proposed Tariffs for 2007/08

Tariff	2006/07 Tariffs (\$ Nominal)	2007/08 Tariffs (\$ Nominal)	
		Authority (based on the Corporation's revised submission)	Corporation (based on the Corporation's original submission)
Residential Water Tariffs			
State-wide residential service charge	154.60	160.22	167.70
State-wide residential consumption charges			
0-150kL	0.49	0.56	0.60
151-350kL	0.73	0.77	0.83
Metro residential consumption charges above 350kL			
351-550kL	0.95	0.97	1.04
551-950kL	1.27	1.31	1.40
Over 950kL	1.59	1.64	1.76
Non-residential Water Tariffs			
Metro and country non-residential major fixture charges			
20mm meter	493.50	536.71	563.90
25mm meter	771.10	838.62	881.10
30mm meter	1,110.40	1,207.63	1,269.00
40mm meter	1,974.00	2,146.85	2,256.00
50mm meter	3,084.00	3,354.04	3,524.00
80mm meter	7,896.00	8,587.40	9,022.00
100mm meter	12,338.00	13,418.35	14,098.00
150mm meter	27,759.00	30,189.66	31,719.00
200mm meter	49,350.00	53,671.23	56,390.00
250mm meter	77,109.00	83,860.89	88,109.00
300mm meter	111,038.00	120,760.82	126,878.00
350mm meter	151,134.00	164,367.74	172,694.00
Non residential metro consumption charges			
0-600kL	0.76	0.80	0.86
601-1,100,000kL	0.84	0.87	0.93
Over 1,100,000kL	0.82	0.85	0.92
Residential Wastewater Tariff			
Metro residential average charge	472.10	496.68	523.10
Non-residential Wastewater Tariffs			
Metro and country non-residential fixture charges			
First Fixture	551.10	579.79	610.60
Second Fixture	235.80	248.08	261.30
Third Fixture	315.00	331.40	349.00

Over 3 Fixtures (each)	342.50	360.33	379.50
Metro and country non-residential volumetric charges	2.06	2.13	2.29
Drainage Tariff			
Metro residential average charge	55.20	58.74	61.20

5 Impacts on Customers

The following tables compare the payment increases in 2007/08 for an average metropolitan residential customer from the Corporation's original submission with the payment increases resulting from the Authority's proposals (incorporating the revised capital expenditure programme).

Table 5.1 shows that an average metropolitan residential customer would pay \$50.10 (5.8 per cent) more in 2007/08 under the Authority's proposals and \$101.60 (11.7 per cent) more under the Corporation's original proposals.

Table 5.1 Impact of Tariff Increases on an Average Metropolitan Residential Customer (\$ nominal)

	2006/07	2007/08	
		Authority (based on the Corporation's revised submission)	Corporation (based on the Corporation's original submission)
Water service charge (\$ nominal)	154.60	160.22	167.70
Water usage charge (300 kL) (\$ nominal)	183.75	200.11	215.25
Sewerage (\$ nominal)	472.10	496.68	523.10
Drainage (\$ nominal)	55.20	58.74	61.20
Total (\$ nominal)	865.65	915.75	967.25
Increase (\$ nominal)		50.10	101.60
Increase (%)		5.8%	11.7%

Figure 5.1 is presented in the same manner as in the Corporation's submission, but shows the impacts of the Authority's tariff proposals in comparison to the Corporation's original tariff proposals. The figure shows the distribution of impacts on suburbs, from an increase of \$83.47 (4.8 per cent) for an average resident in Cottesloe in 2007/08 to \$39.03 (6.0 per cent) for an average resident in Westminster. The comparative figures for the Corporation's original proposals, shown in brackets in the figure, are \$194.30 (11.2 per cent) and \$78.75 (12.1 per cent).¹²

The tables for each suburb that underpin Figure 5.1 are available in Appendix 6.

¹² It should be noted that the calculations are based on each suburbs average gross rental value and usage.

Figure 5.1 Breakdown of Charges 2007/08; Metropolitan Residential Customers – Sample Suburbs¹³

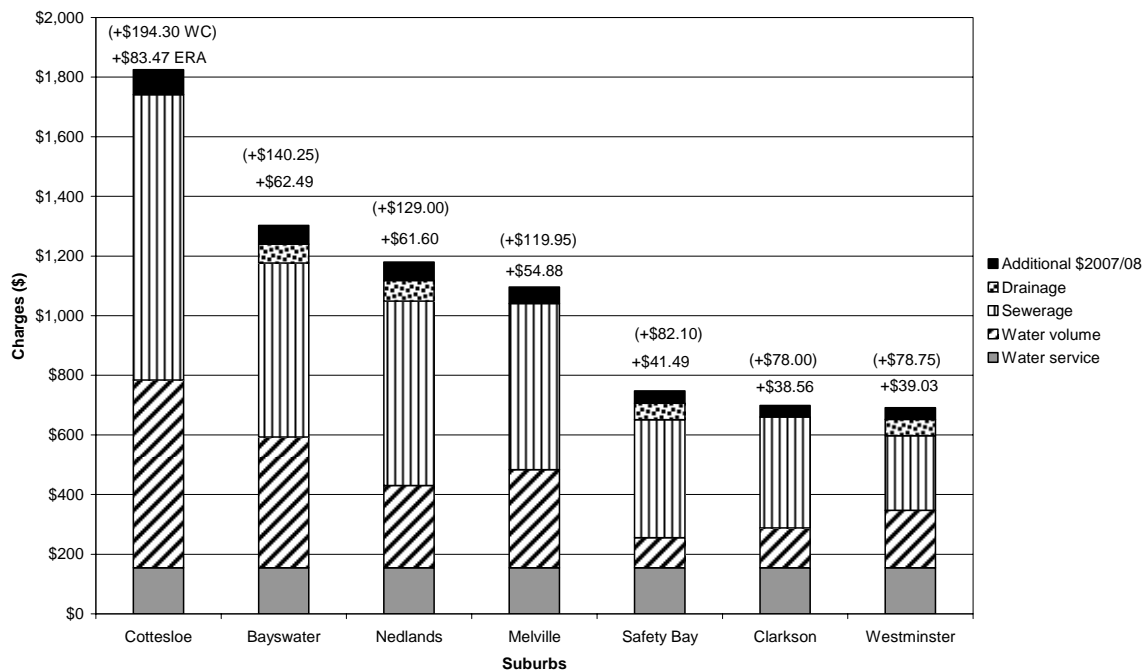


Table 5.2 compares the payment increases in 2007/08 for a typical metropolitan small business from the Corporation's original submission with the payment increases resulting from the Authority's proposals.

Table 5.2 shows that a typical metropolitan small business would pay \$112.74 (5.5 per cent) more in 2007/08 under the Authority's proposals and \$245.25 (12.0 per cent) more under the Corporation's original proposals.

¹³ It should be noted that in some suburbs, drainage services are provided by local authorities and as such are not include in Water Corporation charges.

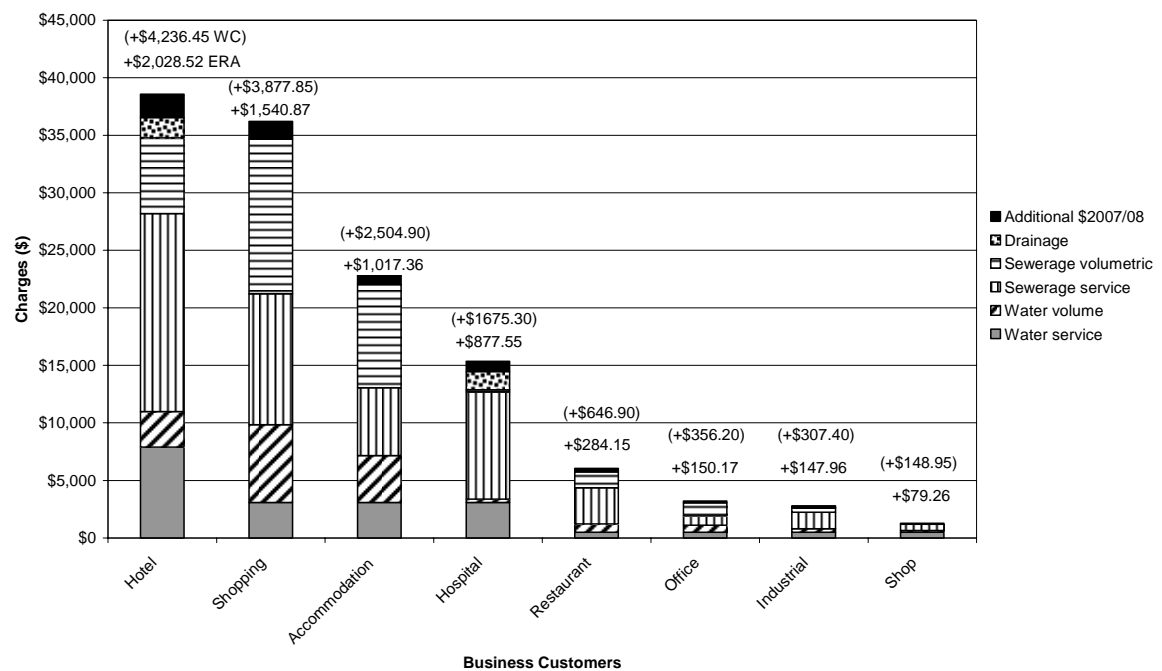
Table 5.2 Impact of Tariff Increases on a Typical Metropolitan Small Business (\$ nominal)

	2006/07	2007/08	
		Authority (based on the Corporation's revised submission)	Corporation (based on the Corporation's original submission)
Water service charge (\$ nominal)	493.50	536.71	563.90
Water usage charge (500 kL) (\$ nominal)	382.00	400.59	430.00
Sewerage (1 fixture, 475 kL discharge) (\$ nominal)	1,118.15	1165.55	1,239.00
Drainage (\$ nominal)	55.20	58.74	61.20
Total (\$ nominal)	2,048.85	2161.59	2,294.10
Increase (\$ nominal)		112.74	245.25
Increase (%)		5.5%	12.0%

Figure 5.2 shows the distribution of impacts on a selection of non-residential customers. The figure shows that the annual increases under the Authority's proposals vary from an increase of \$2028.52 (5.6 per cent) in 2007/08 for a hotel to \$79.26 (6.6 per cent) for a typical shop. The comparative figures for the Corporation's original proposals, shown in brackets in the figure, are \$4236.45 (11.6 per cent) and \$148.95 (12.5 per cent).

The tables for each indicative business that underpin Figure 5.2 are available in Appendix 6.

Figure 5.2 Breakdown of Charges 2007/08; Metropolitan Business Customers – Sample Industry Types



For comparison purposes, the Authority has replicated in Appendix 6 the other more detailed impact tables shown in the Corporation's original submission. The tables show the impacts of the Authority's proposals in comparison to the impacts of the Corporation's original proposals.

6 Impacts on Government Finances

Table 6.1 shows the impacts on the Consolidated Fund for the period 2007/08 to 2016/17 under the Authority's proposals. The table shows that annual net payments to government are expected to be the equivalent of \$145 million over the next ten years, in comparison to \$187 million in 2006/07.

The reduction in payments is largely the result of higher CSO payments, as the pricing method does not have any substantive long term impact on dividends or tax equivalent payments.

Table 6.1 Impacts on Government Finances

	Annual payments for 2006/07 (as estimated by the Authority)	Annual equivalent payments for the period 2007/08 to 2016/17 (real dollars of 30 June 2007)
Dividend payments	\$368m	\$374m
Tax equivalent payments	\$186m	\$188m
CSOs	- \$367m	- \$418m
Net payments to government	\$187m	\$145m

The higher CSO payments are largely the net result of:

- greater losses for country water services as cost increases in the country exceed revenue increases;
- greater losses for drainage services (drainage services in the country are free of charge); and
- lesser losses for country wastewater services as the Corporation continues to increase the level of cost recovery in the country.

The breakdown of CSO payments is provided in Table 6.2.

No comparison with the Corporation's proposals have been made because of the change to the capital expenditure path underlying the Corporation's original submission.

Table 6.2 Impacts on CSOs

	Annual payments for 2006/07 (\$ million, as estimated by the Authority)	Annual equivalent payments for the period 2007/08 to 2016/17 (\$ million, real dollars of 30 June 2007)	Variation (\$ million)
Country Losses			
Water	210.2	262.9	52.7
Wastewater	39.2	24.2	-15.1
Drainage	9.7	30.3	20.6
Irrigation	7.5	7.8	0.3
<i>Total Country Losses</i>	266.6	325.2	58.6
Metro Losses			
Wastewater	20.3	17.8	-2.6
<i>Total Metro Losses</i>	20.3	17.8	-2.6
Concessions			
Metropolitan	58.0	50.5	-7.5
Country	21.9	24.1	2.2
<i>Total Concessions</i>	79.9	74.6	-5.4
Total CSOs	366.9	417.5	50.7

APPENDICES

Appendix 1: Terms of Reference

INQUIRY ON THE WATER CORPORATION'S TARIFFS

Terms of Reference

I, ERIC RIPPER, Treasurer, pursuant to section 32(1) of the *Economic Regulation Authority Act 2003* (the ERA Act), request that the Economic Regulation Authority (the Authority) undertake an annual inquiry and make recommendations on the most appropriate level of tariffs for the Water Corporation's (as established by the *Water Corporation Act 1995*) customers.

While a major review of tariffs is envisaged, perhaps once every three years, the annual reviews under these Terms of Reference would be more limited and may focus on particular issues of relevance at the time. The Authority is to investigate and report on the following matters:

1. Based on the Water Corporation's fees and charges submission to Government, the Authority is to provide advice on an annual basis, on the appropriate tariff levels for the Water Corporation's services (residential and non residential);
2. The impact on the Water Corporation's customers associated with the recommended tariff levels; and
3. The impact on the State Government's net financial position associated with the recommended tariff levels.

In developing its recommendations the Authority is to have regard to the Government's social, economic and environmental policy objectives and to the following policies:

- the pricing principles of the 1994 Council of Australian Governments water reform agreement and the National Water Initiative;
- the Western Australian State Government's Uniform Pricing Policy;
- the Western Australian State Government's Sustainability Policy;
- the Western Australian State Government's Community Service Obligations Policy; and
- the pricing mechanisms available to the Water Corporation through the *Water Agencies (Powers) Act 1984*.

The Authority will make available to the Treasurer a draft report before close of business on the third Friday in February each year and a final report as soon as practicable thereafter.

**ERIC RIPPER MLA
DEPUTY PREMIER; TREASURER;
MINISTER FOR STATE DEVELOPMENT**

Appendix 2: Impacts of Deferring the South West Yarragadee Pipeline Project by One Year

The Authority has analysed the impacts on consumers of deferring by one year the project to pipe water from the South West Yarragadee.

The following table compares the charges that would apply in 2007/08 under the alternative South West Yarragadee scenario in comparison to the charges that would apply if the South West Yarragadee project proceeded as proposed by the Corporation.

Table A2.1 Comparison of the Tariffs Under the Scenario Where South West Yarragadee is Deferred by One Year with the Scenario Where South West Yarragadee is not Deferred

Tariff	2006/07 Tariffs (\$ Nominal)	2007/08 Tariffs (\$ Nominal)	
		Defer SWY by one year	No Deferral
Residential Water Tariffs			
State-wide residential service charge	154.60	160.75	162.43
State-wide residential consumption charges			
0-150kL	0.49	0.56	0.56
151-350kL	0.73	0.77	0.77
Metro residential consumption charges above 350kL			
351-550kL	0.95	0.97	0.97
551-950kL	1.27	1.31	1.31
Over 950kL	1.59	1.64	1.64
Non-residential Water Tariffs			
Metro and country non-residential major fixture charges			
20mm meter	493.50	538.08	542.29
25mm meter	771.10	840.76	847.33
30mm meter	1,110.40	1,210.71	1,220.17
40mm meter	1,974.00	2,152.33	2,169.15
50mm meter	3,084.00	3,362.61	3,388.88
80mm meter	7,896.00	8,609.33	8,676.58
100mm meter	12,338.00	13,452.62	13,557.71
150mm meter	27,759.00	30,266.76	30,503.20
200mm meter	49,350.00	53,808.30	54,228.64
250mm meter	77,109.00	84,075.05	84,731.84
300mm meter	111,038.00	121,069.21	122,014.99
350mm meter	151,134.00	164,787.49	166,074.79
Non residential metro consumption charges			
0-600kL	0.76	0.80	0.80
601-1,100,000kL	0.84	0.87	0.87
Over 1,100,000kL	0.82	0.85	0.85
Residential Wastewater Tariff			
Metro residential average charge	472.10	496.60	496.60
Non-residential Wastewater Tariffs			
Metro and country non-residential fixture charges			
First Fixture	551.10	579.70	579.70
Second Fixture	235.80	248.04	248.04

Third Fixture	315.00	331.35	331.35
Over 3 Fixtures (each)	342.50	360.27	360.27
Metro and country non-residential volumetric charges	2.06	2.13	2.13
Drainage Tariff			
Metro residential average charge	55.20	58.73	58.73

The following table shows that an average metropolitan residential customer would pay \$50.54 more in 2007/08 if the South West Yarragadee project were deferred by one year and \$52.22 more if the project proceeded as proposed by the Corporation (a difference of \$1.68). By 2016/17 an average metropolitan residential customer would pay \$14.46 less per annum if the project had been deferred by one year.

Table A2.2 Impact of Tariff Increases on an Average Metropolitan Residential Customer Under the Scenario Where South West Yarragadee is Deferred by One Year

	2006/07 (\$ Nominal)	2007/08 (\$ Nominal)	
		Defer SWY by one year	No Deferral
Water service charge (\$ nominal)	154.60	160.75	162.43
Water usage charge (300 kL) (\$ nominal)	183.75	200.11	200.11
Sewerage (\$ nominal)	472.10	496.60	496.60
Drainage (\$ nominal)	55.20	58.73	58.73
Total (\$ nominal)	865.65	916.19	917.87
Increase (\$ nominal)		50.54	52.22
Increase (%)		5.8%	6.0%

The following table shows that a typical metropolitan small business would pay \$114.01 more in 2007/08 if the South West Yarragadee project were deferred by one year and \$118.21 more in 2007/08 if the project proceeded as proposed by the Corporation (a difference of \$4.20). By 2016/17 a typical metropolitan small business would pay \$53.54 less per annum if the project had been deferred by one year.

Table A2.3 Impact of Tariff Increases on a Typical Metropolitan Small Business Under the Scenario Where South West Yarragadee is Deferred by One Year

	2006/07 (\$ Nominal)	2007/08 (\$ Nominal)	
		Defer SWY by one year	No Deferral
Water service charge (\$ nominal)	493.50	538.08	542.29
Water usage charge (500 kL) (\$ nominal)	382.00	400.59	400.59
Sewerage (1 fixture, 475 kL discharge) (\$ nominal)	1,118.15	1,165.46	1,165.46
Drainage (\$ nominal)	55.20	58.73	58.73
Total (\$ nominal)	2,048.85	2,162.86	2,167.06
Increase (\$ nominal)		114.01	118.21
Increase (%)		5.6%	5.8%

Appendix 3: Impacts of Adjusting Usage Charges to Reflect the Most Recent Estimates of LRMC

Although the Authority is not recommending an increase in usage charges to reflect the most recent estimates of LRMC, the Authority has analysed the impacts of doing so. The usage charge for consumption below 550 kL per year would be \$0.99 per kL, phased-in by 2013/14 as per the Government's current transition path, and the usage charge for consumption between 550 kL and 950 kL per year would be \$1.40 per kL.

The following table compares the charges that would apply in 2007/08 under the new LRMC scenario in comparison to the charges that would apply using the existing LRMC estimates.

Table A3.1 Comparison of the Tariffs for 2007/08 Using the Revised versus Existing LRMC estimates

Tariff	2006/07 2007/08 Tariffs (\$ Nominal)		
	Tariffs (\$ Nominal)	New LRMC	Existing LRMC
Residential Water Tariffs			
State-wide residential service charge	154.60	153.83	160.22
State-wide residential consumption charges			
0-150kL	0.49	0.58	0.56
151-350kL	0.73	0.80	0.77
Metro residential consumption charges above 350kL			
351-550kL	0.95	0.99	0.97
551-950kL	1.27	1.33	1.31
Over 950kL	1.59	1.64	1.64
Non-residential Water Tariffs			
Metro and country non-residential major fixture charges			
20mm meter	493.50	520.80	536.71
25mm meter	771.10	813.75	838.62
30mm meter	1,110.40	1,171.82	1,207.63
40mm meter	1,974.00	2,083.19	2,146.85
50mm meter	3,084.00	3,254.59	3,354.04
80mm meter	7,896.00	8,332.77	8,587.40
100mm meter	12,338.00	13,020.48	13,418.35
150mm meter	27,759.00	29,294.51	30,189.66
200mm meter	49,350.00	52,079.83	53,671.23
250mm meter	77,109.00	81,374.33	83,860.89
300mm meter	111,038.00	117,180.14	120,760.82
350mm meter	151,134.00	159,494.07	164,367.74
Non residential metro consumption charges			
0-600kL	0.76	0.82	0.80
601-1,100,000kL	0.84	0.89	0.87
Over 1,100,000kL	0.82	0.88	0.85
Residential Wastewater Tariff			
Metro residential average charge	472.10	496.68	496.68
Non-residential Wastewater Tariffs			
Metro and country non-residential fixture			

charges

First Fixture	551.10	579.79	579.79
Second Fixture	235.80	248.08	248.08
Third Fixture	315.00	331.40	331.40
Over 3 Fixtures (each)	342.50	360.33	360.33
Metro and country non-residential volumetric charges	2.06	2.13	2.13

Drainage Tariff

Metro residential average charge	55.20	58.74	58.74
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The following table shows that an average metropolitan residential customer would pay \$50.55 more in 2007/08 under the revised LRMC scenario and \$50.10 more under the existing LRMC approach. The reason that the impacts are similar is that as usage charges are increased, the fixed charge is decreased.

Table A3.2 Comparison of Tariff Increases on an Average Metropolitan Residential Customer Using the Existing and Revised LRMC Estimates

	2006/07 (\$ Nominal)	2007/08 (\$ Nominal)	
		New LRMC	Existing LRMC
Water service charge (\$ nominal)	154.60	153.83	160.22
Water usage charge (300 kL) (\$ nominal)	183.75	206.95	200.11
Sewerage (\$ nominal)	472.10	496.68	496.68
Drainage (\$ nominal)	55.20	58.74	58.74
Total (\$ nominal)	865.65	916.20	915.75
Increase (\$ nominal)		50.55	50.10
Increase (%)		5.8%	5.8%

The following table shows that a typical metropolitan small business would pay \$108.23 more in 2007/08 under the revised LRM scenario and \$112.74 more under the existing LRM approach.

Table A3.3 Comparison of Tariff Increases on a Typical Metropolitan Small Business Using the Existing and Revised LRM Estimates

	2006/07 (\$ Nominal)	2007/08 (\$ Nominal)	
		New LRM	Existing LRM
Water service charge (\$ nominal)	493.50	520.80	536.71
Water usage charge (500 kL) (\$ nominal)	382.00	411.99	400.59
Sewerage (1 fixture, 475 kL discharge) (\$ nominal)	1,118.15	1,165.55	1165.55
Drainage (\$ nominal)	55.20	58.74	58.74
Total (\$ nominal)	2,048.85	2,157.08	2161.59
Increase (\$ nominal)		108.23	112.74
Increase (%)		5.3%	5.5%

Appendix 4 Authority's Proposed Tariffs (\$nominal)¹⁴

Metro Metro Water Tariff [\$ Nominal] Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Fixed Tariff	154.60	160.22	165.66	171.28	177.08	183.09	189.29	195.70
Residential Demand Tariff								
0 – 150	0.49	0.56	0.63	0.71	0.78	0.87	0.95	1.05
151 – 200	0.73	0.77	0.81	0.86	0.90	0.95	1.00	1.05
201 – 250	0.73	0.77	0.81	0.86	0.90	0.95	1.00	1.05
251 – 300	0.73	0.77	0.81	0.86	0.90	0.95	1.00	1.05
301 – 350	0.73	0.77	0.81	0.86	0.90	0.95	1.00	1.05
351 – 400	0.95	0.97	0.98	0.99	1.01	1.02	1.03	1.05
401 – 450	0.95	0.97	0.98	0.99	1.01	1.02	1.03	1.05
451 – 500	0.95	0.97	0.98	0.99	1.01	1.02	1.03	1.05
501 – 550	0.95	0.97	0.98	0.99	1.01	1.02	1.03	1.05
551 – 650	1.27	1.31	1.34	1.38	1.41	1.45	1.49	1.53
651 – 750	1.27	1.31	1.34	1.38	1.41	1.45	1.49	1.53
750 - 950	1.27	1.31	1.34	1.38	1.41	1.45	1.49	1.53
951 - 1150	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93
1150 - 1550	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93
1550 - 1950	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93
>1950	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93
Commercial & Industrial Fixed Tariff								
20mm meter	493.50	536.71	582.33	631.83	685.53	743.80	807.02	875.61
25mm meter	771.10	838.62	909.90	987.24	1,071.15	1,162.19	1,260.98	1,368.16
30mm meter	1,110.40	1,207.63	1,310.27	1,421.64	1,542.48	1,673.58	1,815.83	1,970.17
40mm meter	1,974.00	2,146.85	2,329.32	2,527.31	2,742.12	2,975.19	3,228.08	3,502.45
50mm meter	3,084.00	3,354.04	3,639.13	3,948.44	4,284.05	4,648.18	5,043.26	5,471.92
80mm meter	7,896.00	8,587.40	9,317.30	10,109.24	10,968.49	11,900.78	12,912.31	14,009.81
100mm meter	12,338.00	13,418.35	14,558.87	15,796.33	17,138.96	18,595.72	20,176.30	21,891.22

¹⁴ Note that the Authority's estimates of the average metropolitan residential wastewater and drainage charge differs to that of the Corporation.

150mm meter	27,759.00	30,189.66	32,755.69	35,539.81	38,560.58	41,838.11	45,394.22	49,252.58
200mm meter	49,350.00	53,671.23	58,233.12	63,182.75	68,553.08	74,379.87	80,701.92	87,561.33
250mm meter	77,109.00	83,860.89	90,988.80	98,722.56	107,113.66	116,217.98	126,096.14	136,813.91
300mm meter								
	111,038.00	120,760.82	131,025.10	142,161.82	154,245.12	167,355.46	181,580.14	197,013.87
350mm meter								
	151,134.00	164,367.74	178,338.48	193,496.68	209,943.28	227,787.79	247,149.02	268,155.90
20mm meter (Strata)	154.60	160.22	165.66	171.28	177.08	183.09	189.29	195.70
Fixed Tariff	-	-	-	-	-	-	-	-
Commercial & Industrial Demand Tariff								
0 – 600	0.76	0.80	0.84	0.88	0.92	0.96	1.00	1.05
601 – 1,100,000	0.84	0.87	0.90	0.92	0.95	0.98	1.01	1.05
over 1,100,000	0.82	0.85	0.88	0.91	0.94	0.98	1.01	1.05
Metro Wastewater Tariff [\$ Nominal]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Average Fixed Tariff	461.74	485.78	509.87	535.14	561.67	589.52	618.75	649.42
Commercial & Industrial Fixed Tariff								
First Fixture	551.10	579.79	608.53	638.70	670.37	703.60	738.49	775.10
Second Fixture	235.80	248.08	260.37	273.28	286.83	301.05	315.98	331.64
Third Fixture	315.00	331.40	347.83	365.07	383.17	402.17	422.11	443.03
Over 3 Fixtures (each)	342.50	360.33	378.19	396.94	416.62	437.28	458.96	481.71
Strata Title	342.50	360.33	378.19	396.94	416.62	437.28	458.96	481.71
First Fixture, Aged Homes	148.00	155.70	163.42	171.53	180.03	188.96	198.32	208.16
Over 1 Fixture, Aged Homes	65.10	68.49	71.88	75.45	79.19	83.11	87.24	91.56
First Fixture, Exempt & Charitable	148.00	155.70	163.42	171.53	180.03	188.96	198.32	208.16
Vacant land	188.10	197.89	207.70	218.00	228.81	240.15	252.06	264.55
Commercial & Industrial Demand Tariff								
>200kL	2.06	2.13	2.20	2.26	2.33	2.40	2.48	2.55

Metro Drainage Tariff [\$ Nominal]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential	59.05	62.84	66.71	70.82	75.18	79.82	84.73	89.95
Commercial	403.00	428.84	455.27	483.31	513.09	544.70	578.26	613.89
Vacant Land	74.59	79.37	84.27	89.46	94.97	100.82	107.03	113.62

Country Water Tariff [\$ Nominal]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential, Fixed Tariff								
Fixed Tariff	154.60	160.22	165.66	171.28	177.08	183.09	189.29	195.70
Residential Demand Tariff								
Class 1a								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.88	0.91	0.93	0.95	0.97	1.00	1.02	1.05
401-450kL	0.88	0.91	0.93	0.95	0.97	1.00	1.02	1.05
451-500kL	0.88	0.91	0.93	0.95	0.97	1.00	1.02	1.05
501-550kL	0.88	0.91	0.93	0.95	0.97	1.00	1.02	1.05
551-650kL	1.27	1.31	1.34	1.38	1.42	1.45	1.49	1.53
651-750kL	1.27	1.31	1.34	1.38	1.42	1.45	1.49	1.53
751-950kL	1.62	1.62	1.61	1.60	1.58	1.57	1.55	1.53
951-1150 kL	1.62	1.67	1.71	1.75	1.80	1.84	1.89	1.93
1151-1550kL	2.33	2.29	2.25	2.20	2.14	2.08	2.01	1.93
1551-1950kL	2.68	2.61	2.52	2.42	2.31	2.19	2.07	1.93
>1950kL	3.12	2.99	2.85	2.69	2.52	2.34	2.14	1.93
Class 2a								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05

251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.85	0.97	1.09	1.23	1.36	1.51	1.67
351-400kL	0.91	1.00	1.10	1.20	1.31	1.42	1.54	1.67
401-450kL	0.91	1.00	1.10	1.20	1.31	1.42	1.54	1.67
451-500kL	1.18	1.24	1.30	1.37	1.44	1.51	1.59	1.67
501-550kL	1.18	1.24	1.30	1.37	1.44	1.51	1.59	1.67
551-650kL	1.33	1.48	1.63	1.79	1.97	2.14	2.33	2.53
651-750kL	1.33	1.48	1.63	1.79	1.97	2.14	2.33	2.53
751-950kL	2.20	2.25	2.29	2.34	2.38	2.43	2.48	2.53
951-1150 kL	2.20	2.33	2.47	2.61	2.76	2.92	3.09	3.26
1151-1550kL	3.21	3.23	3.24	3.25	3.26	3.26	3.26	3.26
1551-1950kL	3.97	3.90	3.82	3.73	3.62	3.51	3.39	3.26
>1950kL	5.07	4.88	4.65	4.41	4.16	3.88	3.58	3.26
Class 3a								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.96	1.20	1.46	1.72	2.01	2.31	2.62
351-400kL	0.91	1.12	1.34	1.57	1.81	2.07	2.34	2.62
401-450kL	0.91	1.12	1.34	1.57	1.81	2.07	2.34	2.62
451-500kL	1.29	1.46	1.63	1.81	1.99	2.19	2.40	2.62
501-550kL	1.29	1.46	1.63	1.81	1.99	2.19	2.40	2.62
551-650kL	1.53	1.87	2.22	2.60	2.99	3.41	3.85	4.31
651-750kL	1.53	1.87	2.22	2.60	2.99	3.41	3.85	4.31
751-950kL	2.45	2.68	2.92	3.17	3.44	3.71	4.01	4.31
951-1150 kL	2.45	2.85	3.27	3.71	4.17	4.66	5.17	5.71
1151-1550kL	3.71	3.97	4.23	4.50	4.78	5.08	5.39	5.71
1551-1950kL	4.90	5.02	5.13	5.24	5.36	5.47	5.59	5.71
>1950kL	5.91	5.92	5.90	5.88	5.85	5.81	5.77	5.71
Class 4a								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	1.03	1.34	1.67	2.02	2.39	2.78	3.19

351-400kL	0.91	1.19	1.48	1.78	2.11	2.45	2.81	3.19
401-450kL	0.91	1.19	1.48	1.78	2.11	2.45	2.81	3.19
451-500kL	1.41	1.63	1.86	2.10	2.35	2.61	2.89	3.19
501-550kL	1.41	1.63	1.86	2.10	2.35	2.61	2.89	3.19
551-650kL	1.69	2.26	2.86	3.48	4.15	4.85	5.59	6.38
651-750kL	1.69	2.26	2.86	3.48	4.15	4.85	5.59	6.38
751-950kL	2.79	3.23	3.69	4.17	4.68	5.22	5.78	6.38
951-1150 kL	2.79	3.23	3.69	4.17	4.68	5.22	5.78	6.38
1151-1550kL	5.07	5.25	5.42	5.60	5.78	5.98	6.17	6.38
1551-1950kL	6.08	6.14	6.19	6.23	6.28	6.31	6.35	6.38
>1950kL	7.09	7.04	6.96	6.87	6.77	6.65	6.52	6.38
Class 5a								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	1.03	1.34	1.67	2.02	2.39	2.78	3.19
351-400kL	0.91	1.19	1.48	1.78	2.11	2.45	2.81	3.19
401-450kL	0.91	1.19	1.48	1.78	2.11	2.45	2.81	3.19
451-500kL	1.45	1.66	1.89	2.12	2.37	2.63	2.90	3.19
501-550kL	1.45	1.66	1.89	2.12	2.37	2.63	2.90	3.19
551-650kL	1.85	2.40	2.98	3.58	4.23	4.91	5.62	6.38
651-750kL	1.85	2.40	2.98	3.58	4.23	4.91	5.62	6.38
751-950kL	3.12	3.53	3.94	4.38	4.84	5.33	5.84	6.38
951-1150 kL	3.12	3.53	3.94	4.38	4.84	5.33	5.84	6.38
1151-1550kL	6.25	6.29	6.32	6.34	6.36	6.37	6.38	6.38
1551-1950kL	7.26	7.19	7.09	6.98	6.85	6.71	6.55	6.38
>1950kL	8.11	7.94	7.73	7.50	7.26	6.99	6.69	6.38
Class 1b								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
401-450kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05

451-500kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
501-550kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
551-650kL	0.86	0.89	0.91	0.94	0.96	0.99	1.02	1.05
651-750kL	1.27	1.25	1.23	1.20	1.16	1.13	1.09	1.05
751-950kL	1.62	1.62	1.61	1.60	1.58	1.57	1.55	1.53
951-1150 kL	1.62	1.62	1.61	1.60	1.58	1.57	1.55	1.53
1151-1550kL	2.33	2.29	2.25	2.20	2.14	2.08	2.01	1.93
1551-1950kL	2.68	2.61	2.52	2.42	2.31	2.19	2.07	1.93
>1950kL	3.12	2.99	2.85	2.69	2.52	2.34	2.14	1.93
Class 2b								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
401-450kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
451-500kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
501-550kL	0.73	0.85	0.97	1.09	1.23	1.36	1.51	1.67
551-650kL	0.86	0.96	1.07	1.17	1.29	1.41	1.53	1.67
651-750kL	1.33	1.38	1.42	1.47	1.51	1.56	1.61	1.67
751-950kL	2.20	2.25	2.29	2.34	2.38	2.43	2.48	2.53
951-1150 kL	2.20	2.25	2.29	2.34	2.38	2.43	2.48	2.53
1151-1550kL	3.21	3.23	3.24	3.25	3.26	3.26	3.26	3.26
1551-1950kL	3.97	3.90	3.82	3.73	3.62	3.51	3.39	3.26
>1950kL	5.07	4.88	4.65	4.41	4.16	3.88	3.58	3.26
Class 3b								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
401-450kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
451-500kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
501-550kL	0.73	0.96	1.20	1.46	1.72	2.01	2.31	2.62

551-650kL	0.86	1.08	1.30	1.54	1.79	2.05	2.33	2.62
651-750kL	1.53	1.67	1.81	1.96	2.11	2.27	2.44	2.62
751-950kL	2.45	2.68	2.92	3.17	3.44	3.71	4.01	4.31
951-1150 kL	2.45	2.68	2.92	3.17	3.44	3.71	4.01	4.31
1151-1550kL	3.71	3.97	4.23	4.50	4.78	5.08	5.39	5.71
1551-1950kL	4.90	5.02	5.13	5.24	5.36	5.47	5.59	5.71
>1950kL	5.91	5.92	5.90	5.88	5.85	5.81	5.77	5.71
Class 4b								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
401-450kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
451-500kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
501-550kL	0.73	1.03	1.34	1.67	2.02	2.39	2.78	3.19
551-650kL	0.86	1.15	1.44	1.75	2.08	2.43	2.80	3.19
651-750kL	1.69	1.88	2.07	2.27	2.49	2.71	2.94	3.19
751-950kL	2.79	3.23	3.69	4.17	4.68	5.22	5.78	6.38
951-1150 kL	2.79	3.23	3.69	4.17	4.68	5.22	5.78	6.38
1151-1550kL	5.07	5.25	5.42	5.60	5.78	5.98	6.17	6.38
1551-1950kL	6.08	6.14	6.19	6.23	6.28	6.31	6.35	6.38
>1950kL	7.09	7.04	6.96	6.87	6.77	6.65	6.52	6.38
Class 5b								
0-150kL	0.49	0.56	0.63	0.71	0.79	0.87	0.95	1.05
151-200kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
201-250kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
251-300kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
301-350kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
351-400kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
401-450kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
451-500kL	0.73	0.77	0.82	0.86	0.90	0.95	1.00	1.05
501-550kL	0.73	1.03	1.34	1.67	2.02	2.39	2.78	3.19
551-650kL	0.86	1.15	1.44	1.75	2.08	2.43	2.80	3.19
651-750kL	1.85	2.02	2.19	2.37	2.56	2.76	2.97	3.19

751-950kL	3.12	3.53	3.94	4.38	4.84	5.33	5.84	6.38
951-1150 kL	3.12	3.53	3.94	4.38	4.84	5.33	5.84	6.38
1151-1550kL	6.25	6.29	6.32	6.34	6.36	6.37	6.38	6.38
1551-1950kL	7.26	7.19	7.09	6.98	6.85	6.71	6.55	6.38
>1950kL	8.11	7.94	7.73	7.50	7.26	6.99	6.69	6.38
Commercial Water Tariff								
Fixed Tariff								
15 mm & 20mm meter	493.50	536.71	582.33	631.83	685.53	743.80	807.02	875.61
25mm meter	771.10	838.62	909.90	987.24	1,071.15	1,162.19	1,260.98	1,368.16
30mm meter	1,110.40	1,207.63	1,310.27	1,421.64	1,542.48	1,673.58	1,815.83	1,970.17
35mm, 38mm & 40mm meter	1,974.00	2,146.85	2,329.32	2,527.31	2,742.12	2,975.19	3,228.08	3,502.45
50mm meter	3,084.00	3,354.04	3,639.13	3,948.44	4,284.05	4,648.18	5,043.26	5,471.92
70mm, 75mm & 80mm meter	7,896.00	8,587.40	9,317.30	10,109.24	10,968.49	11,900.78	12,912.31	14,009.81
100mm meter	12,338.00	13,418.35	14,558.87	15,796.33	17,138.96	18,595.72	20,176.30	21,891.22
140mm & 150mm meter	27,759.00	30,189.66	32,755.69	35,539.81	38,560.58	41,838.11	45,394.22	49,252.58
20mm meter (Strata)	154.60	160.22	165.66	171.28	177.08	183.09	189.29	195.70
Exempt	-	-	-	-	-	-	-	-
Demand Tariff								
Class 1								
1-300	0.88	0.90	0.93	0.95	0.97	1.00	1.02	1.05
301+	1.54	1.49	1.43	1.36	1.29	1.22	1.13	1.05
Class 2								
1-300	1.17	1.30	1.44	1.58	1.73	1.89	2.06	2.24
301+	2.08	2.20	2.32	2.45	2.58	2.71	2.86	3.00
Class 3								
1-300	1.28	1.52	1.76	2.02	2.29	2.57	2.87	3.19
301+	2.32	2.82	3.33	3.88	4.45	5.06	5.70	6.38
Class 4								
1-300	1.40	1.62	1.85	2.09	2.35	2.61	2.89	3.19
301+	2.65	3.10	3.58	4.08	4.61	5.17	5.76	6.38
Class 5								
1-300	1.44	1.66	1.88	2.12	2.36	2.62	2.90	3.19
301+	2.96	3.39	3.82	4.28	4.77	5.28	5.81	6.38
Farmland								
Fixed Tariff	154.60	160.22	165.66	171.28	177.08	183.09	189.29	195.70
Demand Tariff	0.99	1.02	1.06	1.09	1.13	1.17	1.21	1.25

Country Wastewater Tariff [\$ Nominal]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Average	486.97	513.31	539.58	566.98	595.55	625.34	656.39	688.75
Commercial Wastewater Tariff								
Fixed Tariff		-	-	-	-	-	-	-
First Fixture	551.10	579.79	608.53	638.70	670.37	703.60	738.49	775.10
Second Fixture	235.80	248.08	260.37	273.28	286.83	301.05	315.98	331.64
Third Fixture	315.00	331.40	347.83	365.07	383.17	402.17	422.11	443.03
Over 3 Fixtures (each)	342.50	360.33	378.19	396.94	416.62	437.28	458.96	481.71
Strata Title	342.50	360.33	378.19	396.94	416.62	437.28	458.96	481.71
First Fixture, Aged Homes	148.00	155.70	163.42	171.53	180.03	188.96	198.32	208.16
Over 1 Fixture, Aged Homes	65.10	68.49	71.88	75.45	79.19	83.11	87.24	91.56
First Fixture, Exempt & Charitable	148.00	155.70	163.42	171.53	180.03	188.96	198.32	208.16
Vacant land	269.36	283.93	298.46	313.62	329.42	345.90	363.07	380.97
Non-Residential User Demand Tariff (>200kL)								
Commercial	2.06	2.13	2.20	2.26	2.33	2.40	2.48	2.55
Caravan Parks	6,815.79	7,184.46	7,552.18	7,935.66	8,335.53	8,752.43	9,187.03	9,640.02
Country Drainage & Irrigation Tariff [\$ Nominal]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Drainage								
Commercial	-	-	-	-	-	-	-	-
Irrigation								
Irrigation	358.46	370.29	381.60	393.26	405.28	417.67	430.44	443.59

Appendix 5 Authority's Proposed Tariffs (\$real dollar values of 2006/07)

Metro								
Metro Water Tariff [\$ 30/06/2007]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Fixed Tariff	154.60	155.11	155.61	156.12	156.62	157.13	157.63	158.14
Residential Demand Tariff								
0 – 150	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151 – 200	0.73	0.75	0.76	0.78	0.80	0.81	0.83	0.85
201 – 250	0.73	0.75	0.76	0.78	0.80	0.81	0.83	0.85
251 – 300	0.73	0.75	0.76	0.78	0.80	0.81	0.83	0.85
301 – 350	0.73	0.75	0.76	0.78	0.80	0.81	0.83	0.85
351 – 400	0.95	0.94	0.92	0.91	0.89	0.88	0.86	0.85
401 – 450	0.95	0.94	0.92	0.91	0.89	0.88	0.86	0.85
451 – 500	0.95	0.94	0.92	0.91	0.89	0.88	0.86	0.85
501 – 550	0.95	0.94	0.92	0.91	0.89	0.88	0.86	0.85
551 – 650	1.27	1.26	1.26	1.25	1.25	1.25	1.24	1.24
651 – 750	1.27	1.26	1.26	1.25	1.25	1.25	1.24	1.24
750 – 950	1.27	1.26	1.26	1.25	1.25	1.25	1.24	1.24
951 – 1150	1.59	1.58	1.58	1.58	1.57	1.57	1.57	1.56
1150 – 1550	1.59	1.58	1.58	1.58	1.57	1.57	1.57	1.56
1550 – 1950	1.59	1.58	1.58	1.58	1.57	1.57	1.57	1.56
>1950	1.59	1.58	1.58	1.58	1.57	1.57	1.57	1.56
Commercial & Industrial Fixed Tariff								
20mm meter	493.50	519.57	547.01	575.90	606.32	638.35	672.07	707.56
25mm meter	771.10	811.83	854.71	899.86	947.39	997.43	1,050.11	1,105.58
30mm meter	1,110.40	1,169.05	1,230.80	1,295.81	1,364.26	1,436.32	1,512.18	1,592.06
40mm meter	1,974.00	2,078.27	2,188.04	2,303.61	2,425.29	2,553.39	2,688.26	2,830.26
50mm meter	3,084.00	3,246.90	3,418.40	3,598.96	3,789.05	3,989.19	4,199.90	4,421.74
80mm meter	7,896.00	8,313.07	8,752.16	9,214.45	9,701.16	10,213.57	10,753.05	11,321.03
100mm meter	12,338.00	12,989.69	13,675.81	14,398.16	15,158.67	15,959.35	16,802.32	17,689.82
150mm meter	27,759.00	29,225.23	30,768.90	32,394.11	34,105.17	35,906.60	37,803.18	39,799.94
200mm meter	49,350.00	51,956.66	54,701.01	57,590.31	60,632.23	63,834.82	67,206.56	70,756.41

250mm meter	77,109.00	81,181.89	85,469.91	89,984.42	94,737.39	99,741.41	105,009.75	110,556.35
300mm meter	111,038.00	116,903.02	123,077.82	129,578.78	136,423.12	143,628.98	151,215.45	159,202.64
350mm meter	151,134.00	159,116.88	167,521.42	176,369.89	185,685.73	195,493.64	205,819.59	216,690.97
20mm meter (Strata)	154.60	155.11	155.61	156.12	156.62	157.13	157.63	158.14
Fixed Tariff	-	-	-	-	-	-	-	-
Commercial & Industrial Demand Tariff								
0 – 600	0.76	0.78	0.79	0.80	0.81	0.82	0.83	0.85
601 – 1,100,000	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.85
over 1,100,000	0.82	0.83	0.83	0.83	0.84	0.84	0.84	0.85

Metro Wastewater Tariff [\$ 30/06/2007]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Average Fixed Tariff	461.74	470.26	478.94	487.78	496.78	505.94	515.28	524.78
Commercial & Industrial Fixed Tariff								
First Fixture	551.10	561.27	571.62	582.17	592.91	603.85	614.99	626.34
Second Fixture	235.80	240.15	244.58	249.09	253.69	258.37	263.14	267.99
Third Fixture	315.00	320.81	326.73	332.76	338.90	345.15	351.52	358.01
Over 3 Fixtures (each)	342.50	348.82	355.26	361.81	368.49	375.28	382.21	389.26
Strata Title	342.50	348.82	355.26	361.81	368.49	375.28	382.21	389.26
First Fixture, Aged Homes	148.00	150.73	153.51	156.34	159.23	162.17	165.16	168.21
Over 1 Fixture, Aged Homes	65.10	66.30	67.52	68.77	70.04	71.33	72.65	73.99
First Fixture, Exempt & Charitable	148.00	150.73	153.51	156.34	159.23	162.17	165.16	168.21
Vacant land	188.10	191.57	195.11	198.70	202.37	206.10	209.91	213.78
Commercial & Industrial Demand Tariff								
>200kL	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06

Metro Drainage Tariff [\$ 30/06/2007]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential	59.05	60.83	62.66	64.55	66.50	68.50	70.56	72.69
Commercial	403.00	415.15	427.65	440.54	453.81	467.48	481.56	496.07
Vacant Land	74.59	76.84	79.15	81.54	84.00	86.53	89.13	91.82

Country Water Tariff [\$ 30/06/2007] ¹⁵								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential, Fixed Tariff								
Fixed Tariff	154.60	155.11	155.61	156.12	156.62	157.13	157.63	158.14
Residential Demand Tariff								
Class 1a								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.88	0.88	0.87	0.87	0.86	0.86	0.85	0.85
401-450kL	0.88	0.88	0.87	0.87	0.86	0.86	0.85	0.85
451-500kL	0.88	0.88	0.87	0.87	0.86	0.86	0.85	0.85
501-550kL	0.88	0.88	0.87	0.87	0.86	0.86	0.85	0.85
551-650kL	1.27	1.27	1.26	1.26	1.25	1.25	1.24	1.24
651-750kL	1.27	1.27	1.26	1.26	1.25	1.25	1.24	1.24
751-950kL	1.62	1.57	1.51	1.46	1.40	1.35	1.29	1.24
951-1150 kL	1.62	1.61	1.60	1.60	1.59	1.58	1.57	1.56
1151-1550kL	2.33	2.22	2.11	2.00	1.89	1.78	1.67	1.56
1551-1950kL	2.68	2.52	2.36	2.20	2.04	1.88	1.72	1.56
>1950kL	3.12	2.90	2.67	2.45	2.23	2.01	1.79	1.56
Class 2a								

¹⁵ The cap that applies to residential country water tariffs is \$2.50 per kL (in dollars of 30/06/06) for the second tier and \$5.00 per kL (in dollars of 30/06/06) for the third and fourth tiers. It should be noted that the tariffs expressed in this table are in dollars of 30/06/07 and as such do not exceed these caps.

0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.82	0.91	1.00	1.08	1.17	1.26	1.35
351-400kL	0.91	0.97	1.04	1.10	1.16	1.22	1.28	1.35
401-450kL	0.91	0.97	1.04	1.10	1.16	1.22	1.28	1.35
451-500kL	1.18	1.20	1.22	1.25	1.27	1.30	1.32	1.35
501-550kL	1.18	1.20	1.22	1.25	1.27	1.30	1.32	1.35
551-650kL	1.33	1.43	1.53	1.64	1.74	1.84	1.94	2.04
651-750kL	1.33	1.43	1.53	1.64	1.74	1.84	1.94	2.04
751-950kL	2.20	2.17	2.15	2.13	2.11	2.09	2.07	2.04
951-1150 kL	2.20	2.26	2.32	2.38	2.44	2.51	2.57	2.63
1151-1550kL	3.21	3.13	3.04	2.96	2.88	2.80	2.71	2.63
1551-1950kL	3.97	3.78	3.59	3.40	3.20	3.01	2.82	2.63
>1950kL	5.07	4.72	4.37	4.02	3.68	3.33	2.98	2.63
Class 3a								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.93	1.13	1.33	1.53	1.72	1.92	2.12
351-400kL	0.91	1.08	1.26	1.43	1.60	1.77	1.95	2.12
401-450kL	0.91	1.08	1.26	1.43	1.60	1.77	1.95	2.12
451-500kL	1.29	1.41	1.53	1.65	1.76	1.88	2.00	2.12
501-550kL	1.29	1.41	1.53	1.65	1.76	1.88	2.00	2.12
551-650kL	1.53	1.81	2.09	2.37	2.65	2.93	3.20	3.48
651-750kL	1.53	1.81	2.09	2.37	2.65	2.93	3.20	3.48
751-950kL	2.45	2.60	2.74	2.89	3.04	3.19	3.34	3.48
951-1150 kL	2.45	2.76	3.07	3.38	3.69	4.00	4.31	4.62
1151-1550kL	3.71	3.84	3.97	4.10	4.23	4.36	4.49	4.62
1551-1950kL	4.90	4.86	4.82	4.78	4.74	4.70	4.66	4.62
>1950kL	5.91	5.73	5.54	5.36	5.17	4.99	4.80	4.62
Class 4a								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85

201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	1.00	1.26	1.52	1.79	2.05	2.31	2.58
351-400kL	0.91	1.15	1.39	1.62	1.86	2.10	2.34	2.58
401-450kL	0.91	1.15	1.39	1.62	1.86	2.10	2.34	2.58
451-500kL	1.41	1.58	1.74	1.91	2.08	2.24	2.41	2.58
501-550kL	1.41	1.58	1.74	1.91	2.08	2.24	2.41	2.58
551-650kL	1.69	2.19	2.68	3.18	3.67	4.16	4.66	5.15
651-750kL	1.69	2.19	2.68	3.18	3.67	4.16	4.66	5.15
751-950kL	2.79	3.13	3.46	3.80	4.14	4.48	4.81	5.15
951-1150 kL	2.79	3.13	3.46	3.80	4.14	4.48	4.81	5.15
1151-1550kL	5.07	5.08	5.09	5.10	5.12	5.13	5.14	5.15
1551-1950kL	6.08	5.95	5.82	5.68	5.55	5.42	5.29	5.15
>1950kL	7.09	6.81	6.54	6.26	5.98	5.71	5.43	5.15
Class 5a								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	1.00	1.26	1.52	1.79	2.05	2.31	2.58
351-400kL	0.91	1.15	1.39	1.62	1.86	2.10	2.34	2.58
401-450kL	0.91	1.15	1.39	1.62	1.86	2.10	2.34	2.58
451-500kL	1.45	1.61	1.77	1.93	2.09	2.25	2.42	2.58
501-550kL	1.45	1.61	1.77	1.93	2.09	2.25	2.42	2.58
551-650kL	1.85	2.32	2.80	3.27	3.74	4.21	4.68	5.15
651-750kL	1.85	2.32	2.80	3.27	3.74	4.21	4.68	5.15
751-950kL	3.12	3.41	3.70	3.99	4.28	4.57	4.86	5.15
951-1150 kL	3.12	3.41	3.70	3.99	4.28	4.57	4.86	5.15
1151-1550kL	6.25	6.09	5.93	5.78	5.62	5.47	5.31	5.15
1551-1950kL	7.26	6.96	6.66	6.36	6.06	5.76	5.45	5.15
>1950kL	8.11	7.68	7.26	6.84	6.42	6.00	5.57	5.15
Class 1b								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85

301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
401-450kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
451-500kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
501-550kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
551-650kL	0.86	0.86	0.86	0.86	0.85	0.85	0.85	0.85
651-750kL	1.27	1.21	1.15	1.09	1.03	0.97	0.91	0.85
751-950kL	1.62	1.57	1.51	1.46	1.40	1.35	1.29	1.24
951-1150 kL	1.62	1.57	1.51	1.46	1.40	1.35	1.29	1.24
1151-1550kL	2.33	2.22	2.11	2.00	1.89	1.78	1.67	1.56
1551-1950kL	2.68	2.52	2.36	2.20	2.04	1.88	1.72	1.56
>1950kL	3.12	2.90	2.67	2.45	2.23	2.01	1.79	1.56
Class 2b								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
401-450kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
451-500kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
501-550kL	0.73	0.82	0.91	1.00	1.08	1.17	1.26	1.35
551-650kL	0.86	0.93	1.00	1.07	1.14	1.21	1.28	1.35
651-750kL	1.33	1.33	1.33	1.34	1.34	1.34	1.34	1.35
751-950kL	2.20	2.17	2.15	2.13	2.11	2.09	2.07	2.04
951-1150 kL	2.20	2.17	2.15	2.13	2.11	2.09	2.07	2.04
1151-1550kL	3.21	3.13	3.04	2.96	2.88	2.80	2.71	2.63
1551-1950kL	3.97	3.78	3.59	3.40	3.20	3.01	2.82	2.63
>1950kL	5.07	4.72	4.37	4.02	3.68	3.33	2.98	2.63
Class 3b								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85

401-450kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
451-500kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
501-550kL	0.73	0.93	1.13	1.33	1.53	1.72	1.92	2.12
551-650kL	0.86	1.04	1.22	1.40	1.58	1.76	1.94	2.12
651-750kL	1.53	1.62	1.70	1.78	1.87	1.95	2.03	2.12
751-950kL	2.45	2.60	2.74	2.89	3.04	3.19	3.34	3.48
951-1150 kL	2.45	2.60	2.74	2.89	3.04	3.19	3.34	3.48
1151-1550kL	3.71	3.84	3.97	4.10	4.23	4.36	4.49	4.62
1551-1950kL	4.90	4.86	4.82	4.78	4.74	4.70	4.66	4.62
>1950kL	5.91	5.73	5.54	5.36	5.17	4.99	4.80	4.62
Class 4b								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
401-450kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
451-500kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
501-550kL	0.73	1.00	1.26	1.52	1.79	2.05	2.31	2.58
551-650kL	0.86	1.11	1.35	1.60	1.84	2.09	2.33	2.58
651-750kL	1.69	1.82	1.95	2.07	2.20	2.32	2.45	2.58
751-950kL	2.79	3.13	3.46	3.80	4.14	4.48	4.81	5.15
951-1150 kL	2.79	3.13	3.46	3.80	4.14	4.48	4.81	5.15
1151-1550kL	5.07	5.08	5.09	5.10	5.12	5.13	5.14	5.15
1551-1950kL	6.08	5.95	5.82	5.68	5.55	5.42	5.29	5.15
>1950kL	7.09	6.81	6.54	6.26	5.98	5.71	5.43	5.15
Class 5b								
0-150kL	0.49	0.54	0.59	0.64	0.69	0.74	0.79	0.85
151-200kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
201-250kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
251-300kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
301-350kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
351-400kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
401-450kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85
451-500kL	0.73	0.75	0.77	0.78	0.80	0.81	0.83	0.85

501-550kL	0.73	1.00	1.26	1.52	1.79	2.05	2.31	2.58
551-650kL	0.86	1.11	1.35	1.60	1.84	2.09	2.33	2.58
651-750kL	1.85	1.96	2.06	2.16	2.27	2.37	2.47	2.58
751-950kL	3.12	3.41	3.70	3.99	4.28	4.57	4.86	5.15
951-1150 kL	3.12	3.41	3.70	3.99	4.28	4.57	4.86	5.15
1151-1550kL	6.25	6.09	5.93	5.78	5.62	5.47	5.31	5.15
1551-1950kL	7.26	6.96	6.66	6.36	6.06	5.76	5.45	5.15
>1950kL	8.11	7.68	7.26	6.84	6.42	6.00	5.57	5.15
Commercial Water Tariff								
Fixed Tariff								
15 mm & 20mm meter	493.50	519.57	547.01	575.90	606.32	638.35	672.07	707.56
25mm meter	771.10	811.83	854.71	899.86	947.39	997.43	1,050.11	1,105.58
30mm meter	1,110.40	1,169.05	1,230.80	1,295.81	1,364.26	1,436.32	1,512.18	1,592.06
35mm, 38mm & 40mm meter	1,974.00	2,078.27	2,188.04	2,303.61	2,425.29	2,553.39	2,688.26	2,830.26
50mm meter	3,084.00	3,246.90	3,418.40	3,598.96	3,789.05	3,989.19	4,199.90	4,421.74
70mm, 75mm & 80mm meter	7,896.00	8,313.07	8,752.16	9,214.45	9,701.16	10,213.57	10,753.05	11,321.03
100mm meter	12,338.00	12,989.69	13,675.81	14,398.16	15,158.67	15,959.35	16,802.32	17,689.82
140mm & 150mm meter	27,759.00	29,225.23	30,768.90	32,394.11	34,105.17	35,906.60	37,803.18	39,799.94
20mm meter (Strata)	154.60	155.11	155.61	156.12	156.62	157.13	157.63	158.14
Exempt	-	-	-	-	-	-	-	-
Demand Tariff								
Class 1								
1-300	0.880	0.875	0.870	0.865	0.860	0.855	0.850	0.845
301+	1.538	1.439	1.340	1.241	1.142	1.043	0.944	0.845
Class 2								
1-300	1.170	1.261	1.352	1.443	1.535	1.626	1.717	1.808
301+	2.084	2.133	2.182	2.231	2.280	2.329	2.378	2.427
Class 3								
1-300	1.284	1.469	1.653	1.838	2.022	2.207	2.392	2.576
301+	2.323	2.727	3.132	3.536	3.940	4.344	4.749	5.153
Class 4								
1-300	1.404	1.572	1.739	1.907	2.074	2.242	2.409	2.576
301+	2.646	3.004	3.362	3.720	4.078	4.437	4.795	5.153
Class 5								
1-300	1.442	1.604	1.766	1.928	2.090	2.252	2.414	2.576
301+	2.965	3.278	3.590	3.903	4.215	4.528	4.840	5.153

Farmland								
Fixed Tariff	154.60	155.11	155.61	156.12	156.62	157.13	157.63	158.14
Demand Tariff	0.99	0.99	0.99	1.00	1.00	1.01	1.01	1.01
Country Wastewater Tariff [\$ 30/06/2007]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Residential Fixed Tariff								
Average	486.97	496.91	506.85	516.80	526.74	536.68	546.62	556.57
Commercial Wastewater Tariff								
Fixed Tariff		-	-	-	-	-	-	-
First Fixture	551.10	561.27	571.62	582.17	592.91	603.85	614.99	626.34
Second Fixture	235.80	240.15	244.58	249.09	253.69	258.37	263.14	267.99
Third Fixture	315.00	320.81	326.73	332.76	338.90	345.15	351.52	358.01
Over 3 Fixtures (each)	342.50	348.82	355.26	361.81	368.49	375.28	382.21	389.26
Strata Title	342.50	348.82	355.26	361.81	368.49	375.28	382.21	389.26
First Fixture, Aged Homes	148.00	150.73	153.51	156.34	159.23	162.17	165.16	168.21
Over 1 Fixture, Aged Homes	65.10	66.30	67.52	68.77	70.04	71.33	72.65	73.99
First Fixture, Exempt & Charitable	148.00	150.73	153.51	156.34	159.23	162.17	165.16	168.21
Vacant land	269.36	274.86	280.36	285.86	291.36	296.86	302.36	307.86
Non-Residential User Demand Tariff (>200kL)								
Commercial	2.062	2.062	2.062	2.062	2.062	2.062	2.062	2.062
Caravan Parks	6,815.79	6,954.95	7,094.11	7,233.26	7,372.42	7,511.58	7,650.73	7,789.89
Country Drainage & Irrigation Tariff [\$ 30/06/2007]								
Year ending 30 June	2007	2008	2009	2010	2011	2012	2013	2014
Drainage								
Commercial	-	-	-	-	-	-	-	-
Irrigation								
Irrigation	358.46	358.46	358.46	358.46	358.46	358.46	358.46	358.46

Appendix 6: Sample Impact Analysis

Sample Residential Impact Examples

The following tables are presented in the same manner as in the Corporation's submission, but showing the impacts of the Authority's tariff proposals.

Suburb Cottesloe	GRV (\$) 22,620	Cons. (kL) 723		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	629.71	657.73	28.01	4.4%
Sewerage	957.30	1,007.14	49.84	5.2%
Drainage				
Total – ERA	1,741.61	1,825.09	83.47	4.8%
Total - Corporation	1,741.61	1,935.90	194.29	11.2%

Suburb Melville	GRV (\$) 10,660	Cons. (kL) 464		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	328.65	348.86	20.21	6.1%
Sewerage	557.85	586.89	29.04	5.2%
Drainage				
Total – ERA	1,041.10	1,095.98	54.88	5.3%
Total - Corporation	1,041.10	1,161.05	119.95	11.5%

Suburb Clarkson	GRV (\$) 6,760	Cons. (kL) 231		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	133.24	146.78	13.54	10.2%
Sewerage	372.50	391.89	19.39	5.2%
Drainage				
Total - ERA	660.34	698.90	38.56	5.8%
Total - Corporation	660.34	738.35	78.01	11.8%

Suburb Nedlands	GRV (\$) 12,480	Cons. (kL) 408		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	275.45	294.77	19.32	7.0%
Sewerage	618.65	650.86	32.21	5.2%
Drainage	69.40	73.85	4.45	6.4%
Total - ERA	1,118.10	1,179.70	61.60	5.5%
Total - Corporation	1,118.10	1,247.10	129.00	11.5%

Suburb Safety Bay	GRV (\$) 7,176	Cons. (kL) 187		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	101.03	112.78	11.74	11.6%
Sewerage	395.40	415.98	20.58	5.2%
Drainage	55.20	58.74	3.54	6.4%
Total - ERA	706.23	747.73	41.49	5.9%
Total - Corporation	706.23	788.35	82.12	11.6%

Suburb Bayswater	GRV (\$) 11,440	Cons. (kL) 572		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	438.25	460.64	22.39	5.1%
Sewerage	583.90	614.30	30.40	5.2%
Drainage	63.60	67.68	4.08	6.4%
Total - ERA	1,240.35	1,302.84	62.49	5.0%
Total - Corporation	1,240.35	1,380.60	140.25	11.3%

Suburb Westminster	GRV (\$) 4,160	Cons. (kL) 312		
	2006/07	2007/08	Increase	
			\$	%
Water service	154.60	160.22	5.62	3.6%
Water consumption	192.53	209.38	16.85	8.8%
Sewerage	250.00	263.01	13.01	5.2%
Drainage	55.20	58.74	3.54	6.4%
Total - ERA	652.33	691.36	39.03	6.0%
Total - Corporation	652.33	731.10	78.77	12.1%

Sample Commercial Impact Examples

The following tables are presented in the same manner as in the Corporation's submission, but showing the impacts of the Authority's tariff proposals.

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Shopping	33	50	8,097	83%
			Increase	
	2006/07	2007/08	\$	%
Water service	3,084.00	3,354.04	270.04	8.8%
Water consumption	6,763.38	6,998.24	234.86	3.5%
Sewerage service	11,376.90	11,969.17	592.27	5.2%
Sewerage volumetric	13,445.30	13,888.99	443.69	3.3%
Drainage				
Total - ERA	34,669.58	36,210.45	1,540.87	4.4%
Total - Corporation	34,669.58	38,547.45	3,877.87	11.2%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Accommodation	17	50	4,896	93%
			Increase	
	2006/07	2007/08	\$	%
Water service	3,084.00	3,354.04	270.04	8.8%
Water consumption	4,071.34	4,215.44	144.11	3.5%
Sewerage service	5,896.90	6,203.89	306.99	5.2%
Sewerage volumetric	8,976.45	9,272.67	296.22	3.3%
Drainage				
Total - ERA	22,028.69	23,046.05	1,017.36	4.6%
Total - Corporation	22,028.69	24,533.60	2,504.91	11.4%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Hotel	50	80	3,734	90%
			Increase	
	2006/07	2007/08	\$	%
Water service	7,896.00	8,587.40	691.40	8.8%
Water consumption	3,094.09	3,205.25	111.16	3.6%
Sewerage service	17,199.40	18,094.79	895.39	5.2%
Sewerage volumetric	6,594.15	6,811.76	217.61	3.3%
Drainage	1,761.75	1,874.71	112.96	6.4%
Total - ERA	36,545.39	38,573.91	2,028.52	5.6%
Total - Corporation	36,545.39	40,781.85	4,236.46	11.6%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Restaurant	9	20	913	94%
			Increase	
	2006/07	2007/08	\$	%
Water service	493.50	536.71	43.21	8.8%
Water consumption	721.63	752.81	31.18	4.3%
Sewerage service	3,156.90	3,321.25	164.35	5.2%
Sewerage volumetric	1,376.10	1,421.51	45.41	3.3%
Drainage				
Total - ERA	5,748.13	6,032.28	284.15	4.9%
Total - Corporation	5,748.13	6,395.05	646.92	11.3%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Office	2	20	799	93%
			Increase	
	2006/07	2007/08	\$	%
Water service	493.50	536.71	43.21	8.8%
Water consumption	625.76	653.71	27.95	4.5%
Sewerage service	786.90	827.87	40.97	5.2%
Sewerage volumetric	1,152.75	1,190.79	38.04	3.3%
Drainage				
Total - ERA	3,058.91	3,209.07	150.17	4.9%
Total - Corporation	3,058.91	3,415.10	356.19	11.6%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Hospital	27	50	364	58%
			Increase	
	2006/07	2007/08	\$	%
Water service	3,084.00	3,354.04	270.04	8.8%
Water consumption	278.10	291.63	13.53	4.9%
Sewerage service	9,321.90	9,807.19	485.29	5.2%
Sewerage volumetric	195.55	202.00	6.45	3.3%
Drainage	1,594.30	1,696.53	102.23	6.4%
Total - ERA	14,473.85	15,351.39	877.55	6.1%
Total - Corporation	14,473.85	16,149.15	1,675.30	11.6%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Industrial	4	20	388	90%
			Increase	
	2006/07	2007/08	\$	%
Water service	493.50	536.71	43.21	8.8%
Water consumption	296.43	310.86	14.42	4.9%
Sewerage service	1,444.40	1,519.59	75.19	5.2%
Sewerage volumetric	347.65	359.12	11.47	3.3%
Drainage	57.10	60.76	3.66	6.4%
Total - ERA	2,639.08	2,787.05	147.96	5.6%
Total - Corporation	2,639.08	2,946.50	307.42	11.6%

Industry	Fixtures	Meter size	Cons. (kL)	Discharge
Shop	1	20	198	90%
			Increase	
	2006/07	2007/08	\$	%
Water service	493.50	536.71	43.21	8.8%
Water consumption	151.27	158.63	7.36	4.9%
Sewerage service	551.10	579.79	28.69	5.2%
Sewerage volumetric Drainage	-	-	-	0.0%
Total - ERA	1,195.87	1,275.13	79.26	6.6%
Total - Corporation	1,195.87	1,344.80	148.93	12.5%