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Submission to ESC 2008 Water Price Review - Water Plans Issues Paper

The Consumer Utilities Advocacy Centre (CUAC) welcomes the opportunity provided by the Essential Services Commission to put forward a response to the paper 2008 Water Price Review – Water Plans Issues Paper (the Paper).

CUAC is an independent consumer advocacy organisation which ensures the interests of Victorian electricity, gas and water consumers - especially low income, disadvantaged, rural and regional, and Indigenous consumers - are effectively represented in policy and regulatory decisions.

This submission is also supported by the St Vincent de Paul Society Victoria and the Consumer Action Law Centre.

Executive Summary

Water is an essential service and access to it a basic human right. The Commission must therefore give due weight to ensuring affordable access to water for all Victorians.

We recommend that the ESC incorporate the following principles into its consideration of water prices:

- that customers should not be faced with price shocks;
- that price increases are allocated equitably between classes of consumers;
- that all companies must take active steps to develop and implement comprehensive hardship programs to minimise the impacts of future price rises;
- that water businesses must keep capital and operating expenditure to the minimum, to ensure price increases are kept as low as possible;
- that there needs to be tighter control of additional expenditure in this next regulatory period, with no expenditure to be rolled into prices without prior formal approval from the ESC, and that the impact on household prices should be a key factor in determining a materiality threshold.; and
- that price rises to residential consumers should be capped at an agreed maximum level. Any costs above this level should be recovered from state government funding.

We also make the following recommendations in relation to the Water Plans of the following water companies:

Gippsland Water

- The costs of the proposed Water Factory should be recovered from the major water users in the region not from the wider residential customer base, in line with standard cost and price allocation policies.
- The costs of any additional supply augmentation should be deferred until the next price setting period.

GWMWater

- A final decision on the prices for GWMWater should be deferred until funding for the pipeline is confirmed.
- The resultant price path should be smoothed to reduce impacts from a price shock in year 1.

Barwon Water

• The operating cost impacts of the new pipeline from Melbourne should be subject to formal review and their price impacts deferred until the next price period

Central Highlands Water

- The ESC establish formal robust procedures for the authorisation of works beyond those approved in the price determination.
- The price path be smoothed with less of a price shock in year 1.
- Projects are not approved until external funding approval has been obtained.

Coliban Water

- Future additions to expenditure be subject to prior approval from the ESC.
- The price path be less front-loaded.

Wannon Water

• A simpler tariff structure should be developed with broad bands to reflect those customers that receive broadly similar levels of service.

The submission is divided into two segments: Part A outlines generic recommendations that will apply to most if not all water businesses, and addresses issues raised by the ESC in section 2 of the Issues Paper; Part B outlines specific concerns in the individual water companies' Water Plans.

Under the aegis of the CUAC Reference Group, RM Consulting Group was awarded a Partnership Grant to assess the customer impacts of the water plans (attached at Appendix A). The findings of that research have been incorporated into the submission below, but please read the full report for a detailed outline of the issues raised.

Part A: General comments

Water is an essential service and access to it a basic human right. In line with its statutory objectives, we believe that in its consideration of water prices, the Commission must therefore give due weight to ensuring affordable access to water for all Victorians.

The need for new sources of supply is undoubtedly a key issue for water businesses and their customers over the course of the next regulatory period. The short-term supply shortage caused by the drought, as well as longer term decreased forecasts due to climate change, certainly require water companies to be proactive to secure sufficient supply to meet forecast demand. Reduced demand, the result of severe restrictions in most of the State, has also placed pressure on water businesses to increase unit pricing to address the consequent revenue shortfall. Most water businesses are therefore proposing very large price increases over this period.

However it must be remembered that these price increases impose a significant burden on consumers, particularly households on low or fixed income, at a time when household budgets are already under increased stress and households have reduced their consumption as requested.

Drivers of forecast operating expenditure

The Commission has highlighted a range issues in relation to the drivers of forecast operating expenditure – of those, three are of particular concern and we encourage the Commission to look carefully in particular at estimates in relation to the following:

- <u>Forecast electricity prices</u>: while there is upward pressure on electricity prices, (in the immediate short-term due to input constraints caused by the drought and in the longer-term by the addition of a carbon price emissions trading) we would not envisage significant variation in that increase between water companies, unless a particular company's consumption of electricity is likely to rise significantly. We encourage the Commission to ensure there is consistency (in these businesses' assumptions and estimates of price increases) between water companies;
- <u>Climate change response</u>: the introduction of a national emissions trading system in 2011 will certainly incur costs to businesses. While there should be some individual variations, there should be consistency in water companies' forecasting methodologies and the assumptions underlying those calculations (e.g. in relation to emissions trading). Consumers will look to the Commission to ensure forecasts of costs associated with climate change response are fair and reasonable;
- <u>Labour price increases and other input costs</u>: similarly, we would expect some consistency in forecast increases for input costs for businesses (or for a detailed explanation of why costs should be more for an individual business), and recommend the ESC investigate those costs carefully.

Capital expenditure

Consumers are not well positioned to comment in detail on individual projects – we have neither the information nor the resources to be able to assess the merit of projects, and therefore rely heavily on the regulator, government and the water companies to ensure that proposed capital expenditure is reasonable.

As noted above, we acknowledge that there is a need to address supply shortfalls, and to undertake new investment in infrastructure. We also accept that those costs, when reasonable, will be passed through to consumers within the water tariffs. However given the potential burden of high prices on consumers, there is a need to ensure that capex and opex are reasonable. We endorse the Commission's decision to consider the timing of proposed capital programs, and how those costs are allocated over this and future regulatory periods.

Affordability must underpin any approval of capex projects and, should prices rise over a capped amount, we recommend that the State Government contribute to the cost of the project.

Recommendation: That water businesses must keep capital and operating expenditure to the minimum, to ensure price increases are kept as low as possible.

Foregone revenue from the first regulatory period

While the drought and revised supply forecasts did necessitate further unanticipated actions by some water companies, we do not necessarily support the notion that foregone revenue must be recovered in full in the forthcoming regulatory period where that decision adds significant costs to consumers. We would remind the Commission that any revenue shortfall from reduced demand is directly attributable to consumers responding as required by Government and the water businesses. To penalise consumers for obeying restrictions – essentially 'doing the right thing' – not only sends a perverse signal to consumers, but could also place an undue financial burden on households.

In making its decision, we endorse the ESC's decision to assess the expected impact on consumers and ensure that affordability remains the prime determinant in deciding whether and how foregone revenue should be recovered.

Demand forecasts

We look forward to seeing the report by the ESC's consultants, and encourage the ESC to ensure that it is released at an early stage.

Price elasticity of demand

We welcomed the Commission's requirement in its framework approach that businesses demonstrate their understanding of price-demand elasticity, which should rightly underpin any new tariff structures. As the Commission noted in the Issues Paper (p 66) given that many consumers have reduced demand in response to restrictions, their ability to respond to stronger price signals may be limited.

We are disappointed that so few water companies in fact have demonstrated price elasticities of demand, and therefore question their capacity to comment on customer impacts of proposed price increases.

Significantly indoor elasticity for water is very similar regardless of income, with estimations of a 10% price increase giving a 1.3% water reduction outcome. However for outdoor water usage the demand elasticity for various income groups varies significantly. Lower income groups have an elasticity of only -0.19 while middle income groups have an elasticity of -0.46 and higher income groups have elasticity of -0.49. The St Vincent de Paul Society's submission to the ESC water tariff structures review outlined work done on price elasticity and we would recommend it to the Commission.

Dealing with uncertainty

We look to the ESC to develop a mechanism to ensure that when it becomes clear that there is a significant revenue shortfall, there is the capacity to re-open a price determination in order to reduce the risk of a price shock to consumers in the next regulatory period, as well as to ensure that a company's actions are subject to regulatory oversight. It is unacceptable for revenue shortfalls of up to \$15 million to only be dealt with ex post in the next price determination.

We envisage that any mechanism, or combination of mechanisms, would have some form of materiality threshold, and we recommend that in determining that threshold a key factor should be the impact on household prices.

Recommendation:

• That there needs to be tighter control of additional expenditure in this next regulatory period, with no expenditure to be rolled into prices without prior formal approval from the ESC, and that the impact on household prices should be a key factor in determining a materiality threshold.

Prices and tariff structures

In considering proposed price paths that include larger increases earlier in the period, we agree that key criteria for approving that approach must be

- That it has been set with regard to customer preferences; and
- That it does not result in a significant price shock in the first year of the subsequent regulatory period.

We would add to that list that it should not result in a significant price shock in the current regulatory period as well.

While we acknowledge that smoothed price paths may result in higher average bills at the end of the regulatory period, we are also very conscious that households in the short-term are facing real pressures given rising prices in rent, energy, public transport, food etc.

Affordability must underpin water tariffs for households, and we would therefore encourage the Commission to identify an alternate solution.

Given the essentiality of water, we recommend that - as the Government has done with metropolitan water prices - there be a cap instituted above which residential prices are not permitted to rise. Any revenue shortfall should then be financed by Government.

Recommendations:

- That customers should not be faced with price shocks; and
- That price rises to residential consumers should be capped at an agreed maximum level. Any costs above this level should be recovered from state government funding.

Related to the above is the need for companies to be prepared to offer substantive assistance to consumers experiencing financial hardship – the proposed price increases, coupled with other

budget pressures on households, are certain to increase the numbers of consumers presenting with payment difficulties.

Similarly, concessions need to be in alignment with water tariffs to ensure affordability and access, and we therefore encourage the Commission to alert Government to the needs of those consumers within its review of concessions – a percentage based rebate on the bill will be the most effective means of ensuring no household is disadvantaged by price increases, and would provide the most equitable means of ensuring relief.

Companies must ensure that their programs are able to meet that demand – we also encourage the ESC to convey to companies that it will be closely monitoring hardship performance indicators, and that it will be seeking an explanation from a water business if we see increases in, for example, the number of restrictions.

Recommendation: That all companies must take active steps to develop and implement comprehensive hardship programs to minimise the impacts of future price rises.

We are also concerned that some water businesses are relying on residential households to meet most of the cost of infrastructure. The Commission must be vigilant in ensuring that costs are allocated equitably between classes of consumers.

Recommendation: That price increases are allocated equitably between classes of consumers.

Service standards and GSLs

We are disappointed that there remains resistance from water companies to establishing GSL schemes, which have proved to be a drive of improved performance in the metropolitan water authorities.

We applaud Barwon Water, Coliban Water, Wannon Water and Western Water for their introduction of GSL schemes.

Part B: Comments on Individual Water Plans

The research undertaken by RM Consulting Group highlighted a number of issues with individual Water Plans and is attached at Appendix A to provide a full explanation. The following outlines those concerns in brief:

Gippsland Water

Gippsland Water has proposed the largest price increase of all the water businesses, with an average percentage annual increase of 14.9%.

We are deeply concerned at how costs have been allocated between large users and residential households, particularly in relation to the Water Factory. More than 70% of Gippsland Water's water supply and wastewater treatment goes to 6 major industrial customers, and the Water Factory will further service that customer base, yet it is clear that residential households are bearing a significant portion of the burden.

Recommendations:

- That the costs of the proposed Water Factory should be recovered from the major water users in the region not from the wider residential customer base, in line with standard costs and price allocation policies
- That the costs of any additional supply augmentation should be deferred until the next price setting period.

GWMWater

There is significant potential disadvantage for residential customers caused by increased project costs for the Wimmera Mallee pipeline. GWM Water customers already pay the highest average annual water bill in Victoria, and any increase in charges will place too great a pressure on households who will struggle to contribute further given the demographics of the region and the impact of the drought.

We are also concerned at a one-off step change of 17.1% in the first year, and recommend a more gradual price path.

Recommendations:

- A final decision on the prices for GWMWater should be deferred until funding for the pipeline is confirmed.
- The resultant price path should be smoothed to reduce impacts from a price shock in year 1.

Barwon Water

We applaud Barwon's proposal to not recover drought-related higher costs or lost revenue – it sets a precedent for other water businesses. We also welcome the changes to tariff structures, particularly reducing the fixed in relation to the volumetric component of the price and replacing the sewer volume charge.

The approach in relation to the Melbourne-Geelong interconnecting pipeline is of concern. Most problematic is the omission of future operating costs for the system, and we would not wish to see a re-opening of the price determination to account for those costs.

Recommendation:

• The operating cost impacts of the new pipeline from Melbourne should be subject to formal review and their price impacts deferred until the next price period.

Central Highlands Water (CHW)

A price increase of around 25% for households in the first year of the regulatory period would disproportionately disadvantage low-income households. We would expect the ESC to investigate carefully CHW's claims that this price increase is indeed supported by its customers.

We are concerned that the choices given to consumers – pay more at first or pay more at the end – although unacceptable are the only two offered. We encourage the ESC to help water companies taking this approach to seek other alternatives, including through seeking government funding assistance to minimise cash-flow problems.

We are also concerned by CHW's decision to increase its fixed water charge relative to the volumetric charge, which not only runs contrary to most other businesses' approach but also would appear to raise questions about its alignment with the WIRO principles, particularly in encouraging conservation.

We welcome CHW's decision to retain GSL schemes.

Increased expenditure (from \$82million to \$269million) in the first regulatory period is a major driver of price increases, but the lack of regulatory oversight remains of concern. As noted earlier, we see the need for a mechanism to ensure that such expenditure over-runs do not disadvantage consumers, and that there is a rigorous and independent assessment that the expenditure is necessary.

Recommendations:

- The ESC establish formal robust procedures for the authorisation of works beyond those approved in the price determination.
- The price path be smoothed with less of a price shock in year 1.
- Projects are not approved until external funding approval has been obtained.

Coliban Water

We applaud Coliban Water's move to a water charge based mainly on the volumetric component, but are concerned at the proposed front-loaded price rise of 16% in the first two years of the regulatory period. As noted above, such increases severely disadvantage low-income households, who can be assumed to be a significant part of Coliban's customer base, given it has the highest number of domestic consumers on instalment plans.

We are disappointed that Coliban again decided not to introduce a GSL scheme – given its size and customer demographic, we find it hard to understand the rationale for that decision.

Recommendations:

- Future additions to expenditure be subject to prior approval from the ESC.
- The price path be less front-loaded.

Wannon Water

We welcome the emphasis laid on its hardship policy in its Water Plan by Wannon Water, and in particular its decision to not apply the third tier price for consumption for families in hardship. We also endorse its approach to avoiding price shocks for its customers.

The complexity of the tariff structures employed by Wannon Water is admittedly an issue that arises from its history, but does need to be addressed in the future.

Recommendation:

• A simpler tariff structure should be developed with broad bands to reflect those customers that receive broadly similar levels of service.

Please do not hesitate to contact me on 03 9639 7600 should you have any questions about the above submission.

Yours sincerely

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Analysis of Regional Water Companies' Water Plans : 2008/09 to 2012/13

Final Report

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1 Water Plans Audit

1.1 Objective and Workplan

RMCG was commissioned by the Consumer Utilities Advocacy Centre (CUAC) to undertake an audit of the Water Plans submitted to the Essential Services Commission by the regional urban water businesses in October 2007. The objective was to identify priority issues for residential water customers in regional Victoria.

The work program involved two main stages:

- a preliminary screen of the draft and final Water Plans. This stage identified the priorities for the remainder of the exercise; and
- a more in-depth review of the priority plans and issues, based on the final submissions early in October.

This report provides a final report on the second stage updated to take account of the final submissions. This provides a resource to help CUAC prioritise its intervention can act as a submission in response to the ESC's Issues Paper.

2 Prioritisation and Generic Issues

2.1 Impact Assessment

2.1.1 Criteria

The purpose of this first stage was to undertake a first screen to help identify the priority Water Plans and the key issues. In undertaking this analysis we assessed each Water Plan against a number of criteria:

- Size of the current average bill for a 250Kl/year property. This provides a consistent measure based on the ESC's historic approach;
- Size of the increase in the average bill (both by \$ value and % increase) by the end of the five-year price period. This was the primary criterion;
- The size of the customer base to determine the number of customer likely to be affected by the price rise;
- The presence of a stepped (inclining block) tariff and the relative ratio of the fixed-tovariable elements in the water tariff, as both these measures can off-set adverse price rises; and
- Other issues mainly uncertainty in probable final prices.

2.1.2 Assessment Issues

It is important to provide a consistent basis for assessment and comparison that also makes sense for the average water customer. This preliminary assessment therefore calculates a notional water bill for an average residential water customer consuming 250kL/yr. This allows CUAC and water customers to assess what is proposed for an individual water supplier and also to see how their specific changes fit within a wider picture at a state-wide level.

This is the accepted traditional benchmark for assessment and is the figure adopted by the ESC in its reports. It is recognised that the figure of 250kL is now higher than many company averages and that the figures calculated are only indicative of the future impact on bills as:

- The average level of average household consumption varies widely across Victoria, with figures as high as 400kL/yr common in Lower Murray, but most consumers in East Gippsland using less than half that figure;
- The charges vary even within water suppliers dependent on local costs. In the tables below a figure has been calculated that represents an average for consumers in the major centres;
- Customers with higher levels of consumption will generally face larger increases as most 2-part tariffs are now loaded towards the variable component and as inclining block tariffs come into effect.

2.1.3 Assessment Results

Table 2-1 provides a 'league table' of the key data against each of the above criteria for each Water Plan.

Company	2007/08	2012/13	\$ increase	% yearly increase	Customer base	Stepped tariffs	Fixed/ Variable
Barwon	\$699	\$1,208	\$508	11.6%	127,168	No	23:77
Central Highlands	\$786	\$1,210	\$424	9.0%	56,273	Yes	36:64
Coliban	\$595	\$1,030	\$435	11.6%	64,882	Yes	19:81
East Gippsland	\$728	\$1,067	\$339	7.9%	20,025	No	35:65
Gippsland	\$701	\$1,404	\$703	14.9%	61,400	Not yet	26:74
Goulburn Valley	\$504	\$661	\$156	5.6%	54,197	Not yet	34:66
GWMWater	\$797	\$930	\$133	3.2%	20,025	No	51:49
Lower Murray	\$519	\$634	\$115	4.1%	33,335	Yes	66:34
North East	\$604	\$790	\$186	5.5%	41,141	No	23:77
South Gippsland	\$786	\$986	\$200	4.7%	17,800	No	42:58
Wannon	\$705	\$1,133	\$429	10.0%	39,760	Yes	25:75
Western	\$746	\$1,133	\$387	8.74%	50,000	Yes	38:62
Westernport	\$937	\$1,166	\$229	4.5%	15,646	Yes	46:54

Table 2-1: League Table on Water Plan Criteria (Bills for 250KL household)

The charts below present this information graphically, sorted by the size of the average increase in bills both by reference to dollar value and % increase.



Figure 2-1: Increase in Average 250KI Bill over 5-Year Price Period (\$s)

Gippsland Water stands out as by far the largest dollar increase in the average residential water bill over the price period, at \$700/yr increase. There is then a cluster of six water businesses with increases of between \$300-500/yr, with most of the remainder less than \$200/yr. That is a very wide spread of impacts for different water customers.

The same story is also reflected in the analysis of the % increase in the average residential water bill (Figure 2-2).



Figure 2-2: Annual Percentage Increase in Average 250KI Bill (%)

Here Gippsland Water is shown to have by far the highest annual increase at 15%, with a group of six companies between 8 -11% and the remainder largely at 5% or less.

2.2 Prioritised Critique of Water Plans

This preliminary screen and assessment led to a prioritisation for the allocation of time and resources for the detailed critique of the Water Plans in phase two of the study. The analysis identified that the Water Plans fall into three broad bands:

- **Priority 1: High price rise**: More than 14%/year, \$700/year and large company + companies facing considerable uncertainty;
- **Priority 2: Medium rises**: around 10%/year (\$400-\$500/year) and medium to large sized companies; and
- Priority 3: Lower rises: around 5%/year (below \$200/year) and generally smaller companies.

2.2.1 **Priority 1 Category**

a) Gippsland Water

This Water Plan has the largest overall price increase in dollar value and annual percentage. It is also significant as much of the price rise is driven by the costs of a major water-recycling venture (the Water Factory). This initiative raises issues around appropriate cost allocation between customer classes as the project will create recycled water largely for use by industrial customers.

b) GWMWater

GWMWater faces considerable uncertainty. It has been confronted by a major increase in the capital cost of the Wimmera Mallee Pipeline, from a figure of \$400M to over \$650M.

Current prices are still based on the original \$400M figure and cost share, and are only for the first year of the Water Plan. It seems likely that customers will be expected to carry some of the additional costs and so see their prices rise further than currently proposed. The customer base is also particularly sensitive to increases in prices given the current high prices and the low income base of the region.

GWMWater is also important because 40% of its residential customer base is eligible for concessions. This means it is particularly vulnerable to price increases.

2.2.2 Priority 2 Category

The second tier of Water Plans involves six companies:

- Coliban
- Barwon
- Western
- Wannon
- Central Highlands
- East Gippsland

These Water Plans involve prices rises of between \$300-500 over the five year period and annual price rises of around 10%/yr. Three of the companies have stepped tariffs and 2-part structures that places greater weight on the volumetric element. These options give customers greater ability to control the size of the water bills through conservation.

2.2.3 Priority 3 Category

The third tier of the Water Plans involves five, generally smaller companies and price rises around \$200 over the five year period or an average of 5%/yr:

- Westernport
- South Gippsland
- North East
- Goulburn Valley
- Lower Murray

Less time was spent on these Water Plans as the impact on customers was low both in dollar terms and numbers impacted.

2.3 Generic Issues

The analysis below identifies a number of common issues from the critique of the Water Plans – even though there is remarkable divergence in the approaches adopted.

a) Price Paths

Some Water Plans are front-loaded which disadvantages low income families with cash-flow problems, whilst others are smoothed over the five year price period.

Recommendation: customers should not be faced with price shocks.

b) Tariff Design

It is surprising to see the disparity between the Water Plans regarding tariff design, with highly divergent approaches to basic issues such as:

- The ratio between fixed and variable charges. There is a general movement to a greater emphasis on the volumetric element of the water charge – although the final ratios still vary markedly;
- The value of a stepped or inclining block tariff. Several Water Plans support Inclining Block Tariffs whilst other oppose them;
- Some tariffs are simple with averaging over a wide area while others are complex with a strong link between costs and prices at a local level; and
- Guaranteed Service Level standards and payments. Some companies support payments to customers for failure to meet standard levels of service while others oppose this approach.

It cannot be good public policy or justified on the basis of differing circumstances for there to be this wide divergence.

Recommendation: The ESC Tariff Review should set guidelines for best practice tariffs structures in consultation with consumer groups.

d) Hardship Policies

Several companies recognise the importance of hardship policies in responding to the impact of the price rises proposed. Wannon Water and Western Water are both innovative and pro-active in their response.

Recommendation: All companies need to take active steps to develop and implement comprehensive hardship programs to minimise the impacts of future price rises.

e) Expenditure Authorisation

Several of the companies spent far more in the first price period than originally authorised, in response to unprecedented drought conditions. Those costs then flow through into the second price period even though they were not subject to prior ESC scrutiny.

Recommendation: There needs to be tighter control for this next period with no expenditure to be rolled into prices without prior formal approval from the ESC.

f) Losses from 1st Price Period

Many companies lost revenue and faced higher costs in the first price period due to the drought and imposition of water restrictions. However, there are highly varying proposals regarding attempts to recover some or all of these losses as part of the revenue requirements for the 2nd price period.

Recommendation: A revenue cap reduces the risks around demand uncertainty.

g) Sharing the Burden

The most striking issue from the assessment is as to the spread of the price rises and ultimate bills that different customers will face. The disparity is most noted in Gippsland, which contains both ends of the spectrum:

- Gippsland Water: average bill in 2013 of \$1,400, with a rise of \$700 at 15%/yr;
- South Gippsland Water: average bill in 2013 of \$986, with a rise of \$200 at 5%/yr.

The Premier decided that is was unacceptable for different water customers in Melbourne to face different price rises. If it is appropriate for metropolitan customers to share costs of supply augmentation then is it equitable that communities across regional Victoria should be to be expected to carry the full costs of their own water infrastructure?

Recommendation: price rises to residential customers should be capped at an agreed maximum level. Any costs above this level should be recovered from state government funding.

2.4 Recommendations

2.4.1 Generic Recommendations

The following recommendations have been developed as an outcome of the critique.

- customers should not be faced with price shocks.
- The ESC Tariff Review should set guidelines for best practice tariffs structures in consultation with consumer groups.
- All companies need to take active steps to develop and implement comprehensive hardship programs to minimise the impacts of future price rises.
- There needs to be tighter control of additional expenditure in this next period with no expenditure to be rolled into prices without prior formal approval from the ESC.
- A revenue cap reduces the risks around demand uncertainty.
- price rises to residential customers should be capped at an agreed maximum level. Any
 costs above this level should be recovered from state government funding.

2.4.2 Company Specific Recommendations

a) Gippsland Water

- The costs of the proposed Water Factory should be recovered from the major water users in the region not from the wider residential customer base, in line with standard cost and price allocation policies.
- The costs of any additional supply augmentation should be deferred until the next price setting period.

b) GWMWater

- A final decision on the prices for GWMWater should be deferred until funding for the pipeline is confirmed.
- The resultant price path should be smoothed to reduce impacts from a price shock in year 1.

c) Barwon Water

• The operating cost impacts of the new pipeline from Melbourne should be subject to formal review and their price impacts deferred until the next price period

d) Central Highlands Water

- The ESC establish formal robust procedures for the authorisation of works beyond those approved in the price determination.
- The price path be smoothed with less of a price shock in year 1.
- Projects are not approved until external funding approval has been obtained.

e) Coliban Water

- Future additions to expenditure be subject to prior approval from the ESC.
- The price path be less front-loaded.

f) Wannon Water

A simpler tariff structure should be developed with broad bands to reflect those customers that receive broadly similar levels of service.

3 Gippsland Water

3.1 Water Plan Overview

Gippsland Water has proposed the largest price rises of any of the regional water businesses, with an average percentage yearly increase of 14.9%. This takes the average annual residential water bill for 250kL from \$701 to \$1,404 over the five year price period, or a rise of \$703.

Gippsland Water's Water Plan has a number of characteristics that are significant:

- 73% of total water is supplied to six large industrial customers;
- Gippsland faces a significant reduction in the in-flows to its catchments that threatens the high security of supply required for those customers;
- 75% of wastewater treated is discharged by those six large industrial customers;
- Gippsland Water proposes major investment in a new Water Factory that will treat that waste-stream and generate a new recycled water resource to supply existing and new industrial customers;
- The need for additional water resource augmentation is identified but not included in the Water Plan costing or prices; and
- The major critique of the Water Plan is to query the justification for the allocation of costs between those major industrial customers and the wider residential customer base.

3.2 Water Charges

The costs of an average residential water bill for an assumed 250kL/yr household will increase, under the proposed prices, from \$700 in the current year to over \$1,400 by 2013 (Table 3-1). That is an increase of \$703/yr, at a total increase of 100.35% with that increase spread evenly between water and wastewater.

The price path is 'moderated', that is, it is partially front-loaded to reflect the timing of increased expenditure and is partially smoothed to provide a consistent increase across all years.

	T I		1	0	1	
	07-08	08-09	09-10	10-11	11-12	12-13
Water Service	81.56	100.70	122.77	135.05	148.55	163.41
Water Volume	0.9432	1.1572	1.4198	1.5617	1.7179	1.8897
Total Water	317.36	390.00	477.72	525.475	578.025	635.835
Wastewater	383.62	470.66	577.45	635.2	698.72	768.59
Total Charges	700.98	860.66	1055.17	1160.68	1276.75	1404.43
Annual increase (\$)		159.68	194.51	105.51	116.07	127.68
Annual Increase (%)		22.8%	22.6%	10.0%	10.0%	10.0%

Table 3-1: Water Charges for Residential Bill of 250kL/yr (\$)

This increase is the largest in \$ and % terms of any of the regional water businesses and represents an annual average increase of 14.9%. The major driver is operating expenditure, with an \$8M increase in annual expenditure between 2007/08 and 2008/09.

3.3 Water Usage and Demand

The Water Plan confirms that the large majority of water supplied is used by six major industrial customers (Table 3-2). On average major customers consume 73.3% of the total resource. This is very different from the large majority of other water businesses.

	08-09	09-10	10-11	11-12	12-13	Average	%
Residential	10.49	10.24	9.99	9.75	9.51	10.0	15.5%
Non-residential	2.75	2.76	2.77	2.78	2.79	2.8	4.3%
Major Customers	45.47	47.21	47.47	47.67	47.87	47.1	73.3%
Other	4.3	4.4	4.5	4.5	4.5	4.4	6.9%
Total	63.01	64.61	64.73	64.7	64.67	64.3	

Table 3-2: Water Consumption by Customer Group (GL/yr)¹

The table confirms that the amount of water consumed by residential customers will fall over the five year period. The Water Plan records that per capita residential consumption is predicted to fall by 25% from the 1995 base by the year 2015. This means that total residential demand will fall over the price review period, despite an increase in the number of households at around 1%/yr.

By contrast, the table identifies that overall consumption by major customers increases over the same period.

Major Customers mainly consume raw water rather than treated water (see Table 3-3):

	08-09	09-10	10-11	11-12	12-13
Treated water	3.05	3.05	3.05	3.05	3.05
Raw Water	40.92	41.22	41.42	41.62	41.82
Recycled Water	1.5	3.0	3.0	3.0	3.0
Total Demand	45.47	47.27	47.47	47.67	47.87

Table 3-3: Major Customer Water Consumption by type (GL/yr)

The table confirms that demand by the Major Customers for raw water increases over the period and that this customer group is also the beneficiary of the new recycled water resource that comes on-stream in 2008/09.

Water consumption by Major Customers is forecast to increase in 2009/10 as a result of a new production line coming on stream at Australian Paper. In addition, the Water Plan has:

Anticipated that new industries with an estimated demand of 10,000ML may be established within the region over the next 10 years.²

It is evident from the Water Plan, therefore, that the drivers of investment in water resource augmentation are the existing major customers and potential new industrial users – not the existing residential customer base.

¹ Gippsland Water - Water Plan, Table 56, page 150.

² Water Plan, Section 6.4.1: Demand Forecasts, page 144.

3.4 The Gippsland Water Factory

3.4.1 What is the Water Factory?

The Gippsland Water Factory will be an innovative wastewater treatment and recycling system located in the Gippsland region of Victoria. The system will treat up to 35 million litres of domestic and industrial wastewater daily. At completion of the first stage of the project, the Gippsland Water Factory will produce around 8 million litres of high quality recycled water each day for use by local industry.³

The Gippsland Water Factory is the major investment initiative in the Water Plan. This is a \$174M total capital expenditure project. The critical dates for the project are as follows:

- Formal approval was given in August 2006
- Construction work commenced in January 2007,
- Process commissioning should be completed by December 2008
- Two year period of testing and optimisation
- Final hand-over scheduled for December 2010.

The Water Plan identifies that the Water Factory represents 7.9% of the 17.2% annual average price rise required.⁴ That is, the Water Factory by itself generates 46% of the total price rise for the Water Plan period. It is, therefore, clearly a critical question as to how those costs and price rises are apportioned between customer classes. That decision depends on establishing clarity on the project objectives and the relevant pricing principles that follow.

3.4.2 Project Objectives

The construction of the Water Factory has four main objectives:

- 1. To provide a higher quality treatment capacity for existing and new wastewater;
- To reduce significant odour problems from the operation of the current Regional Outfall Sewer (ROS);
- 3. Reduce current leakage from the existing piped section of the ROS, with consequential environmental impacts; and
- 4. To generate a recycled water resource to augment current raw water demand by industry.

3.4.3 Cost Allocation and Pricing Principles

These project objectives trigger two sets of principles for the allocation of costs and the setting of prices:

- A 'polluter-pays' principle for the wastewater treatment; and
- A 'beneficiary-pays' principle for recycled water supply.

³ www.gippslandwaterfactory.com.au/ProjectOverview/

⁴ Water Plan, Section 1.1, Figure 1, page 9.

a) Polluter Pays

Under the 'polluter-pays' principle the costs of the new scheme should be recovered from the dischargers of the waste-stream, as they trigger the need for the investment. This principle would apply to the first three objectives identified above. The relevant costs to include under this principle are those that are required to meet the compliance conditions of the EPA's discharge licence. Within this, the costs should be apportioned between customer groups pro-rata to the cost drivers of that compliance, which may include both total volume and also relative load strength.

The Water Plan does not provide data on the relative percentage of residential as opposed to major customer wastewater to be treated by the new plant. However, it can be assumed that major customers will represent at least 75% of the total as this is the average for the region as a whole. On this basis, an equivalent percentage of the costs should be recovered from this customer group.

b) Beneficiary Pays

Any costs incurred beyond those required to ensure licence compliance can be assumed to be required to create the new recycled water resource. These costs should, by contrast, be recovered from the beneficiaries of that resource, not from the polluters. The Water Plan reiterates the three key principles established by the ESC for recycled water pricing policies:⁵

- Maximise revenue having regard to the price of any alternative substitutes and customers' willingness to pay;
- Cover the full costs of providing the service; and
- Include a variable component.

All the evidence is that water security is far more important than water price for the major water customers in the La Trobe Valley and that the water charges represent a very small part of total input costs. On this basis, it could be assumed that application of the ESC's pricing principles would allocate all the costs under this principle to the customer group that benefits from the additional resource.

In this case the beneficiary is the Major Customer Grouping. In practice, the entire recycled water stream will be supplied to one customer. However, the benefits can be seen to apply to all the major customers as they are both the major users of the combined water resource and also the customer class that is increasing its overall usage over the period. They are also the customer group with the need for the highest levels of security of supply.

It may also reasonably be argued that the cost of ensuring water resource security for 85% of Victoria's power generation should be shared equally by all electricity customers across the state not merely by the 60,000 water customers in the Gippsland region.

⁵ Water Plan: Section 7.2.9.1, Recycled Water Pricing, page 176.

3.4.4 Water Plan Approach to Pricing

The Water Plan confirms that Major Customers represent more than 70% of both water supply and wastewater treated but only 30% of total revenues. It is recognised that some of this discrepancy reflects the supply of raw water as opposed to potable supply. However this does not explain the full disparity between costs and revenues.

It appears that the costs of the Gippsland Water Factory have been recovered equally from across the entire customer base rather than being recovered primarily from those relevant customer groups identified from the analysis above. This explains the very significant increase in residential water bills over the period.

However, it is not possible to check how the costs of the Gippsland Water Factory have been apportioned between customer groups in practice as:

- No data is provided on how the total costs of the project have been split between the two pricing principles;
- No data is provided on how the costs have been apportioned between customer groups within those principles; and
- The Water Plan declines to reveal the detail of proposed prices for the Major Customers as Gippsland Water could not breach the confidentiality of those contracts.⁶

It is clearly a major responsibility of the ESC in its review of the Water Plan to analyse the costs of the proposed project and to allocate those costs and so set prices for different customer groups that meet the principles set out in their own guidance material. Residential customers should be expected to carry only a fair share of the costs of the Water Factory. That should be limited to their proportion of the costs required to meet EPA Licence compliance conditions.

If these costs had been largely allocated to the Major Customers then we could have expected average bills for residential customers to go up by less than 10%/yr, rather than the 15% identified. A 10%/yr price increase would result in a final bill of \$1,128 and an increase of \$427. This would place Gippsland Water back in the middle of the pack with the other larger regional water businesses.

3.4.5 Water Factory: Amenities Facility

The Water Plan also includes proposals for

a multi-function amenities centre...with a strong community educational emphasis.⁷

This will add \$4.9M to the total capital costs of the project and on-going running costs. Once again, these costs should be recovered from customer groups pro-rata to the objectives of the project not from the overall customer base.

⁶ Water Plan, Section 1.6.2, page 29.

⁷ Water Plan, Section 5.3.2, page 105.

3.5 Wider Water Resource Augmentation

The Water Plan identifies that the Water Factory may not be sufficient to ensure adequate water resource security to meet expected demand in the Latrobe system. The Plan records a suite of potential approaches that may also be required, including:

- Conservation and efficiency;
- Re-use and Recycling;
- System Interconnection; and
- Supply Augmentation.

Gippsland Water has determined the costs of a Latrobe System Investment will be significant. Estimates currently range from \$20M to \$150M in capital expenditure requirements alone. A review of potential operating costs has determined that an additional \$7M...would be required.⁸

This additional expenditure has not been included in the Water Plan at this stage as there is still uncertainty as to its requirement and as to the optimal package of measures to progress. At the worst this additional expenditure would increase operating costs by 12% and capital expenditure by 58%.

Any such additional program should be deferred until the next Water Plan period and be subjected to the standard rigorous scrutiny required to justify expenditure and inclusion in the next Water Plan.

3.6 Tariff Issues

Gippsland's Water Plan proposes a number of tariff issues – none of which are contentious:

- The split of the 2-part tariff is 26:74 (fixed:variable), which is fairly standard for the regional businesses;
- An inclining bock tariff (IBT) is not proposed due to negative feedback from market research – despite positive support from more informed focus group discussions. There is some suggestion that Gippsland Water may alter its position if the current ESC Tariff review comes out strongly in support of IBTs;
- The sewer charge is retained as a standard per household fixed charge with no variable element for residential customers. This is now the industry norm;
- Guaranteed Service Levels are not proposed as their market research perceived them as adding costs to all customers to little additional purpose;
- Gippsland Water has an extensive hardship policy package that provides for flexible repayment options and ultimately write-off of bad debt; and
- Trade waste costs may need to increase to implement DSE's revised state-wide policies that Gippsland Water is currently not following. However, these changes should be cost neutral for residential customers.

⁸ Water Plan, Section 5.5.1.6, page 113.

3.7 Conclusion

Gippsland Water is not a normal regional water business. It is mainly a supply organisation to 6 major industrial customers – five of whom are electricity generating stations who supply more than 85% of the power consumed in Victoria. These are state-critical businesses. More than 70% of Gippsland Water's water supply and wastewater treatment goes to these customers, and dedicated assets exist to service them, including a dam, water and wastewater reticulation networks and ocean outfalls.⁹

The Water Plan proposes a major investment initiative to further service the needs of these customers called the Gippsland Water Factory. This will enhance treatment of wastewater streams and generate a new recycled water resource to meet the high security needs of these customers. That is proper and appropriate expenditure. However, the costs of that expenditure should be recovered from those customers whose waste stream generates the need for treatment or who will benefit from the new water resource.

The evidence of the Water Plan confirms that in both cases the six major customers should carry the large majority of costs. In practice, it appears that those costs are recovered from across the wider residential customer base so creating the need for the largest price increases of any of the regional water businesses. The ESC should be directed to ensure that costs have been allocated properly in accordance with its own pricing principles.

Recommendation: 1. That the costs of the proposed Water Factory should be recovered from the major water users in the region not from the wider residential customer base, in line with standard cost and price allocation policies.

2. The costs of any additional supply augmentation should be deferred until the next price setting period.

⁹ Water Plan, Section 2.5.4, page 33.

4 GWMWater

4.1 GWMWater Customer Base

GWMWater is the merged entity created by the amalgamation of the urban water authority Grampians Water and the rural water supply entity Wimmera Mallee Water. GWMWater supplies water to some 30,000 urban water customers and 25,000 wastewater customers across 74 towns covering some 20% of the land area of Victoria from the Grampians in the south north to the Murray.

The region has one of the highest rates of concessions for any of the water businesses across Victoria (Figure 4-1).



Figure 4-1: Concessions Payments per Water Customer¹⁰

This is a function of the current state of the regional economy and also of the significant inflow that has taken place over the last ten years in the number of poorer families resettling in the Wimmera region from Melbourne due to the lower costs of housing.

4.2 The Drought

The Wimmera Region has experienced a lengthy drought with rainfall and inflows at all-time historic lows. This has resulted in severe dislocation of the regional economy as well as impacts on the water company. GWMWater has lost 5.2M in revenue under-recovery due to the drought and imposition of water restrictions. In addition, it has faced higher costs from the need for water carting – although some of those have been off-set by lower fees for water treatment plant operation.

The primary strategic response has been to accelerate the construction of the Wimmera Mallee Pipeline.

¹⁰ ESC (2007), *Water Performance Report – Urban Water and Sewerage Businesses 2005-2006* from Table 4, page 20.

4.3 The Wimmera Mallee Pipeline

4.3.1 Pipeline Design and Benefits

The pipeline replaces 15,000km of open channels and a once-a-year channel run to town water storages with an 8,000km piped, on-demand supply. It will provide higher quality water and greater security of supply with considerably lower system losses. This involves a significant enhancement in the overall standard of service available to urban customers across the region. There is substantial support from across the community for the exercise which is seen as a major instrument to off-set the drought as well as improve supply and generate water savings.

The pipeline consists of seven stages,

- Supply System 1 Rainbow and Yaapeet now largely complete with 1174 km of the distribution network already laid. A formal 'turning-on' ceremony was held on 12 October as the first water flowed to local towns.
- Supply System 2 Progress of the main PVC trunk installation has 96 km pipe in the ground. Works are progressing north of Warracknabeal. This trunk is also utilising the Longerenong Pump Station to supply water for testing.
- Supply System 7 Headworks pipeline in the Grampians. Again this stage is nearly complete.
- Supply System 5 713 kilometres of pipeline has been installed, with pressure testing and installation of meters progressing.

The remainder of the project is due for completion over the next two and a half years.

4.3.2 Pipeline Costs

This pipeline project is a major investment for the region. It was originally costed in 2003 at a capital cost of \$440M. Both the state and federal governments committed to funding of \$167M, with the local community responsible for the remaining capital financing costs as well as the annual running costs and the \$80M costs for on-farm conversion.

A recent review has revealed considerable project cost escalation due to the state of the construction market with a revised cost estimate of \$688M, ie a shortfall of \$248M. The authority has submitted a request for further funding from both the state and federal governments and is completing an Affordability Review to confirm the constraints on further regional contributions. At this stage there final commitments from Governments to the additional funding required for the pipeline are not yet confirmed. The generally accepted political wisdom is that it is inconceivable that government not fund the increased cost given the critical character of the project, its current good progress and the recognised drought impacted status of the region.

4.4 Other Expenditure

The Water Plan also includes proposals for \$75.4M in capital expenditure to provide enhanced services for:

Wastewater treatment upgrades at Warracknabeal;

- Sewer upgrades at various locations such as Lake Bolac and Rupanyup; and
- Piped water supply to Nhill through an extension to the Wimmera Mallee Pipeline.

However, these are relatively minor in comparison with the major expenditure required for the pipeline.

4.5 Tariffs and Proposed Pricing

GWMWater currently has the highest average annual water bill of all the Victorian water businesses, even before expenditure for the pipeline project. The customer base will therefore be considerably impacted by any percentage increase in charges.

The Water Plan, as published, is still based on the original \$440M capital cost and proposes a one-off price rise of 17.1% in year 1 with stable charges for the remainder of the price period. The Plan retains the right to revisit the pricing required in the event that no extension to current funding is obtained. A one-off major step change in price as proposed and then a stable charge is not an attractive proposal for low income customers. They are cash-flow constrained and would prefer staged increments over time. This is also more likely to be matched by increased concessions payments.

The Water Plan involves a continuation of a long-standing rationalisation of tariffs to simplify the range of charges previously in place which varied by town. After the pipeline is complete most urban water customers will be on the same tariff as they will receive the same standard of service.

4.6 Conclusion

The proposed pipeline project will lead to considerable enhancement of the standard of supply for the multiple towns of the region. That is to be welcomed.

However, the current Water Plan is unable to confirm whether there will be further government investment in the pipeline to cover the identified funding shortfall. There is, therefore, considerable uncertainty about the total price impacts of the Water Plan. That is very unsatisfactory for regional customers.

Local water customers already pay the largest water bills across Victoria. These customers have little ability to contribute further to the costs of the pipeline due to the demographic characteristics of the region and the impact of the extended drought.

Finally, the proposed price increase comprising a one off step change of 17.1% in year 1 of the new price period is a highly unattractive price path for the majority of lower income water customers. A more staged price increase should be developed.

Recommendations: 1. A final decision on the prices for GWMWater should be deferred until funding for the pipeline is confirmed.

2. The resultant price path should be smoothed to reduce impacts from a price shock in year 1.

5 Barwon Water

5.1 Water Plan Overview

Barwon Water is by far the largest of the water businesses outside the metropolitan setting. It serves the Geelong region and has twice as many customers as the next largest regional water business, Coliban Water. It also services a major tourist sector with the regional population almost doubling over the summer months from 275,000 to 478,000. This creates a highly variable supply pattern over the year with significant peak demand over a two month period.

The region has experienced drought conditions for the past three years with Stage 4 Water Restrictions in place in Geelong since December 2006. The major expenditure in the Water Plan therefore focuses on promoting supply augmentation initiatives. It is notable that Barwon Water is not proposing to try and recover its higher costs (\$7M) or lost revenue (\$16M) due to the drought in the first price period. That sets a precedent for other water businesses.

5.2 Prices & Tariffs

The average water bill for a household consuming 250kL/year will increase from \$700 to \$1,200 over the five year period, a total increase of 73% or an average of 11.5%/yr (Table 5-1).

	07-08	08-09	09-10	10-11	11-12	12-13	Total
Water Service 20 mm	148.29	102.66	115.00	128.84	144.33	161.69	
Water Volume	0.95	1.35	1.51	1.69	1.90	2.13	
Total water	385.79	440.16	492.5	551.34	619.33	694.19	
Wastewater	313.58	326.08	365.3	409.24	458.46	513.61	
Total Charges	699.37	766.24	857.80	960.58	1077.79	1207.80	
Increase \$		66.87	91.56	102.78	117.21	130.01	508.43
Increase %		9.6%	11.9%	12.0%	12.2%	12.1%	72.7%

Table 5-1: Barwon Water – Increase in Average Bill for 250kL/yr household (\$)

The final Water Plan submission involves some reductions in proposed prices from those in the original draft issues in August. In particular, there are reductions in operating costs and in the assumed cost of capital that drives the shareholder's return on the value of assets. These changes result in 1.5% reduction in price rises between years. That is to be welcomed.

A number of important changes to tariff structures are proposed:

- A significant shift in the balance between the fixed and variable charges in 2008/09, with an increase in the proportion of total water revenue to be generated from volumetric charges from 58% to 75%:
 - a reduction in the water fixed charge from \$148.29 to \$101.25, and
 - an off-setting increase in the variable charge by 41 per cent to \$1.33 per kilolitre

- a slight increase in the proportion of revenue generated from the non-residential customer class, relative to the residential customer class to reflect cost recovery;
- a 2-part tariff is retained with an Inclining Block Tariff rejected as providing no greater benefits;
- the highly complex sewer volume charge for residential customers is removed and replaced by a standard fixed charge. That drives greater simplicity, although it may penalise customers who have installed extensive greywater recycling capability;
- the current Guaranteed Service Level payment scheme is retained with the value of the payments increased to \$65.

These approaches are broadly welcomed as providing greater opportunity for customers to gain the benefit from water conservation initiatives. Barwon Water has a well developed suite of hardship policies and practices in place to respond to low income families with large water bills who may be disadvantaged by these changes.

5.3 Capital Expenditure & Price Drivers

The majority of the new capital expenditure is proposed to augment future water supply capacity for the region. This entails costs of \$318M over the five year period and drives 37% of the proposed price increase.

Supply augmentation initiatives include:

- The Melbourne-Geelong interconnecting pipeline: this 50km pipeline will enable Geelong to draw on the metropolitan systems and access water from the proposed desalination plant. This \$142M project is due for completion in 2011-12. The key issue is that the Water Plan includes its capital financing costs but none of the future operating costs for the system. These costs should get picked up in the next Water Plan rather than triggering a re-opening of the current price determination;
- Angelsea Borefield: This is a \$70M project to access groundwater from the Jan Juc aquifer and supply it by pipeline to the Barwon system. It will augment supply by some 7,000ML/yr;
- Newlingrook Aquifer: this is a further groundwater system in the Otways. Expenditure in the Water Plan is solely for resource review and assessment. Major costs would fall into the next price period;
- Recycling: Barwon is proposing a major initiative to further treat wastewater from its Northern Treatment works to create an additional resource with which to supply Shell at the Corio refinery. This will substitute for current consumption of potable supply. This seems a sensible project as it saves potable supply for residential use. It also provides benefits for domestic customers because Barwon Water's recycled water pricing policy ensures full cost recovery from the beneficiary with no cross-subsidy from the wider customer base. That is a standard principle that should be adopted as a standard.

The other major item of capital expenditure is focused on developing full biosolids re-use.

Recommendation: The operating cost impacts of the new pipeline from Melbourne should be subject to formal review and their price impacts deferred until the next price period

6 Central Highlands Water

6.1 Water Plan Overview

Central Highlands Water services the area around including Ballarat. It has about 56,000 customers and is experiencing strong growth in household numbers. It has experienced serious drought conditions over the last ten years with current Ballarat storage levels at only 12.8% of capacity. Stage 4 water restrictions have been in place since November 2006 and the Water Plan proposes major expenditure to augment supplies.

The three main issues in the Water Plan are:

- the significant increase in capital expenditure in the first price period over and above that authorised by the ESC in its first determination;
- the uncertainty surrounding future Federal Government funding levels for the Goldfields Pipeline. If this is limited then prices will have to rise further than proposed; and
- the proposed price path with its 25% step change increase in the first year of the new price period. This is a highly problematic approach for low income families.

6.2 Prices and Price Path

Central Highlands Water proposes an increase in average bills for 250kL from \$785/yr to a figure of \$1,200 by the end of the price period. This involves an increase of \$423/yr representing an overall increase of 54% or an average annual rise of 9% (Table 6-1).

As noted, the price path is front-loaded with a step change of around 25% in the first year and then stable increases at a lower level of 5.5% for the remaining years.

	07-08	08-09	09-10	10-11	11-12	12-13
Water Service 20 mm	83.21	173.51	183.16	193.34	204.09	215.43
Water Volume	0.9554	1.222	1.29	1.362	1.438	1.517
Total water	322.06	479.01	505.66	533.84	563.59	594.68
Wastewater	463.92	495.43	522.97	552.05	582.74	615.14
Total Charges	785.98	974.44	1028.63	1085.89	1146.33	1209.82
Annual increase \$		188.46	54.19	57.26	60.44	63.49
Annual increase %		24.0%	5.6%	5.6%	5.6%	5.5%

Table 6-1: Central Highlands Water	- Increase in Bill for	[·] 250kL/yr household (\$)
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This frontloading is proposed to meet the cash-flow requirements of the business and results in a lower overall level of price rise by the end of the period than does a steady equal percentage rise each year, where the business makes a loss in the early years and has to over-correct in the later years. The approach was apparently supported by the majority of customers who responded to the consultation on the draft Water Plan.

However, the stepped approach is highly problematic and opposed by low income families who face major challenges in terms of their own cash-flow budgets and will not have the ability to meet a major increase in year 1 of the new price period. CUAC would argue for a revised price path that means that low income customers face a smaller increase in any year.

6.3 Tariff Issues

Other relevant tariff issues include:

- a proposal to rebalance revenues between water and wastewater services to make both more cost reflective. This is fair for customers who do not receive both services.
- a reduction in the number of different charges by area, with a simplified approach that provides 'levelised' prices for all towns receiving the same level of service. This appears equitable;
- the maintenance of a 3 step Inclining Block Tariff. 65% of all revenue comes from the lowest band, with only 11% coming from the top tier. This gives comfort that most households will be able to manage within the lowest band;
- the increase in the size of the fixed water charge to \$173.51 in 2008/09 sees an increase in the relative importance of fixed charges, rising from 26% to 36% of total water charges. This is a contrary direction to most water businesses that are giving customers greater opportunity to control the size of their bills by reducing the fixed charge;
- the retention of Guaranteed Service Levels (GSLs) to provide payments for those customers who do not receive an agreed minimum standard of service. That provides incentives to improve performance and recognises the impact on individual customers;
- recycled water is priced at full cost recovery which reduces risks of cross-subsidy from wider water customers;
- the discount for non-residential water customers is being un-wound to ensure that all water customers pay an equivalent price and receive strong signals to promote conservation.

6.4 Expenditure Review – First Price Period

The major expenditure in the Water Plan proposed relates to water supply augmentation. It is important to deal with this across the two price periods.

In the first price period Central Highlands Water was authorised to spend \$82M on new capital works. In practice it spent \$269M. That expenditure may have been critical, necessary and efficient, but the disparity between the plan and actual expenditure calls into question the robustness of the regulatory regime. Those costs were not subject to scrutiny as part of the first price determination but will still be added to the regulatory asset base on which Central Highlands Water is entitled to earn a return on capital during the second price period. That drives increases in prices.

Table 6-2 highlights the major capital expenditure proposed for the current financial year of \$182.6M. It also confirms the major step change in the total revenue required between the current financial year and the first year of the new price period, with a leap from \$50M to \$70M. This is driven by a number of factors:

- Recovery of lost revenue from the first price period (\$7M) due to reduced demand
- Increased Return on Assets (\$7M) driven by the previous enlarged capital expenditure
- Increased Operating Expenditure (\$5.5M) from the costs of operating new assets.

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Operating Expenditure	37.80	43.23	45.83	48.07	45.51	45.47
Return on Assets	7.25	14.05	15.54	16.20	16.72	17.12
Regulatory Depreciation	5.64	6.40	8.01	8.31	9.18	9.72
Adjustment from Period 1		7.27				
Total Revenue Requirement	50.69	70.96	69.38	72.57	71.41	72.30
Total Capital Expenditure	182.6	53.6	25.5	22.2	20.9	18.2

Table 6-2:	Central Highlands	- Revenue	Requirement	(\$M)
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It is now too late to challenge the necessity or appropriateness of that expenditure. What is required, however, is a far more rigorous process of review if any similar challenges arise during this second price period and a requirement that no additional expenditure will be authorised unless it has been subject to prior audit and approval by the ESC.

6.5 Expenditure Review – Second Price Period

In this Water Plan, Central Highlands proposes to invest in a suite of initiatives mainly to augment supply security:

- Goldfields Pipeline;
- Ballarat West Groundwater scheme
- Newlyn to Cosgrave Inter-connect
- Wastewater treatment and recycling; and
- Extension of water and sewer services to smaller country towns

The major concern to customers is that the Water Plan prices are based on an assumption that the Federal Government will provide additional funding for the Goldfields Pipeline. Central Highlands Water asked for \$90M and merely received \$31M in a recent announcement. Central Highlands suggest that they will be able to manage with the current proposed prices for this second price period but that failure to receive further funding will mean far higher prices when we move into the third pricing period.

It is highly unsatisfactory that major expenditure proposals are progressed to the point of approval and works start on-ground before funding from Government is certain. Any decision on expenditure needs to take account of the ability and willingness of customers to pay for the total package involving the combined elements of: security of supply / quality of service / price / price path. Otherwise customers are faced with a 'fait accompli' and are unable to make a credible choice between options with different trade-offs between cost and quality.

Recommendation: 1. That the ESC establish formal robust procedures for the authorisation of works beyond those approved in the price determination.

2. That the price path be smoothed with less of a price shock in year 1.

3. That projects are not approved until external funding approval has been obtained.

7 Coliban Water

7.1 Water Plan Overview

Coliban Water is the second largest regional water business and supplies some 65,000 customers across central Victoria and up to the Murray, based on the two main centres of Bendigo and Echuca. As with Central Highlands Water, the major thrust of the Water Plan is on works needed to augment water supplies in response to the unprecedented drought. Customers in Bendigo have been on Stage 4 Water Restrictions since July 2004.

The issues for the Water Plan are:

- authorisation of major additional expenditure during the first price period;
- concerns about historically high levels of restrictions;
- uncertainty about the final costs of the proposed rural supply reconfiguration program;
- the front-loaded price path.

7.2 Water Costs, Prices and Price Path

Coliban Water proposes an increase in average bills for 250kL from \$594/yr to a figure of \$1,030 by the end of the price period. This involves an increase of \$435/yr representing an overall increase of 73% or an average annual rise of 11.6% (Table 7-1).

As noted, the price path is front-loaded with rises of around 16% in the early years reducing to lower % increases (between 6-10%) in the remaining years.

	07-08	08-09	09-10	10-11	11-12	12-13
Water Service 20 mm	115.8	100	100	100	100	100
Water Volume < 200kL	0.6697	0.904	1.130	1.300	1.495	1.644
Water Volume > 200kL	0.8101	1.094	1.367	1.572	1.808	1.989
Total Water	290.25	335.50	394.38	438.53	489.31	528.24
Wastewater	304.46	359.57	413.50	454.85	477.60	501.47
Total Charges	594.71	695.07	807.88	893.38	966.91	1029.72
Annual increase \$		100.36	112.81	85.51	73.52	62.81
Annual increase %		16.9%	16.2%	10.6%	8.2%	6.5%

Table 7-1: Coliban Water – Increase in Bill for 250kL/yr household (\$)

Low income customers would prefer a smoother price path with lower averaged increases in the early years.

In Coliban Water's case, the large majority of revenue requirement is driven by operating expenditure (Table 7-2). This reflects the historical decision by the Minister in 2004 to set a very low figure for the current asset value of the business. The table shows the significant effect that the investment in new assets has on the revenue requirement of the business, as it climbs from a combined figure of around \$2M at the start to a figure of \$14M by the end of the period.

The table also shows the impact of recovering lost revenue from the first price period with a charge of \$3.64M recorded in each year to give a total cost of \$18.2M. This reflects the loss of revenue from reduced demand following the imposition of tough water restrictions.

	08-09	09-10	10-11	11-12	12-13	Total
Operating expenditure	55.19	52.44	51.44	51.15	52.1	262.32
Return on old assets	7.80	7.58	7.36	7.15	6.95	36.84
Depreciation of old assets	4.28	4.28	4.24	4.06	3.78	20.64
Return on new assets	1.23	3.48	5.51	7.49	8.98	26.69
Depreciation of new assets	0.90	2.31	3.30	4.22	5.03	15.76
Total new assets	2.13	5.79	8.81	11.71	14.01	42.45
Adjustments from period 1	3.64	3.64	3.64	3.64	3.64	18.20
TOTALS	73.04	73.73	75.49	77.71	80.48	380.45

 Table 7-2:
 Coliban Water – Revenue Requirement (\$M)

7.3 Tariff Issues

There are a number of tariff changes and issues worth identifying:

- there is a proposal to shift far more of the water tariff onto the variable element of the charge. This sees a reduction in the fixed charge from \$120 to \$100 as from July 2008 and a corresponding increase in the variable charge from 67 cents to 90 cents/kL. This leaves Coliban Water at the head of the pack with a ratio between fixed and variable of 19:81 by the end of the price period. This change gives customers greater chance to control the size of their bill and see their conservation measures rewarded;
- a three tier Inclining Block Tariff is retained from the first price period
- the number of different tariff zones is reduced further to two main locations. This provides greater clarity and equity between customers;
- Coliban Water has decided against the introduction of Guaranteed Service Level rebates;
- The Water Plan identifies the uncertainty that exists about future levels of demand once water restrictions are removed. The risk to customers is that demand will be higher than forecast and that Coliban Water will therefore recover more revenue than it requires. The Water Plan provides an innovative proposal to cap revenues for the last year of the Water Plan if this occurs. This is a positive initiative that limits risks to customers from the price control mechanisms used;

7.4 Expenditure Issues

The major issue relates to the greatly increased levels of expenditure incurred in the first price period over and above that forecast and approved in the original price determination. That price review approved total capital expenditure of \$47M by Coliban Water in the three year period from 2005/06 to 2007/08. In practice, Coliban Water spent \$213M, mainly in response to unprecedented drought conditions and the need to invest in water supply augmentation measures (

Table 7-3).

Project	2005/06	2006/07	2007/08	Total
Goldfields Superpipe	0.15	36.72	62.55	99.42
Epsom Spring Gully	0.31	22.83	14.93	38.07
Bulk Water Purchases	0.3	6.52	11.78	18.6
Recycling Projects initiated	0.48	0.93	0	1.41
Total	1.24	67	89.26	157.5

Table 7-3:	Major New Pro	piects Additional	to Coliban's	Water Plan	(\$m)
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As with the commentary for Central Highlands Water, this expenditure may have been necessary and appropriate but it is unsatisfactory that it was undertaken outside the formal price setting process. In the case of Coliban Water, the evidence is that a very comprehensive program of community engagement and consultation was undertaken to obtain input and support from all sectors of the regional community before the expenditure was approved.

The other concern relates to the proposed expenditure of \$40M for the reconfiguration of the rural supply system. This will benefit the wider residential customer base by reducing water losses that can then be used to supply Bendigo. Any increase in costs should be covered by the water business and be subject to critique in the next price setting exercise.

7.5 Hardship Policies

Historically, Coliban Water has been one of the major users of restrictions for non-payment of bills, with 413 domestic water customers restricted in 2005-06. They have also been far above other water businesses in their use of formal legal action, with 1.84/100 domestic customers, where all other businesses are less than 0.2/100.¹¹

On the other hand Coliban Water also had the highest number of domestic customers on instalment plans – with 11.6% of their customers using this facility, where most businesses were around 5%.

Coliban Water asserts that these figures reflect the fact that they have a very extensive and active customer debt and payment management system and that they seek to intervene early to reduce the risk of debt escalating. According to the Water Plan and website, the hardship policy seems to be at least as comprehensive as those of the rest of the industry. The plan also acknowledges the impact that the proposed price increases will have on customers and the importance of hardship management arrangements to mitigate those impacts.

Recommendation: 1. That future additions to expenditure be subject to prior approval from the ESC.

2. That the price path be less front-loaded.

¹¹ ESC (2007), Water Performance Report, February 2007.

8 East Gippsland

8.1 Water Plan Overview

East Gippsland Water services a large area of south east Victoria covering an area of 20,000km and a customer base of 21,000. The major centres of population are Bairnsdale and Lakes Entrance. The area is a major tourist region encompassing the Gippsland Lakes and southern coastal beaches and has to cater for an equal number of additional consumers during the summer months.

The company faces the challenge of servicing a large area with a relatively small and dispersed population. 30% of water is used by a number of non-domestic customers, mainly in vegetable processing.

8.2 Prices and Price Paths

The average bill for a 250kL household in Bairnsdale will increase from \$725/yr to over \$1,000 over the five year period, involving an increase of \$338 or 46.5% overall. This equates to an annual increase of 7.9% (Table 8-1). These figures are for customers in Bairnsdale who represent the single largest group, but who face an increase in wastewater charges over the period. Other customers will face lower increases.

	07-08	08-09	09-10	10-11	11-12	12-13
Water Service 20 mm	152.191	155	159	163	167	172
Water Volume	0.8936	0.96	1.03	1.12	1.2	1.3
Total water	375.591	395.00	416.50	443.00	467.00	497.00
Wastewater	352.86	390.00	435.00	480.00	520.00	570.00
Total Charges	728.45	785.00	851.50	923.00	987.00	1067.00
annual increase \$		56.55	66.50	71.50	64.00	80.00
Annual increase %		7.8%	8.5%	8.4%	6.9%	8.1%

Table 8-1: East Gippsland - Increase in Bill for 250kL/yr Bairnsdale household (\$)

As can be seen in the last row in the table the price rises are relatively stable across the five year with no price spike early in the period as with some other Water Plans.

8.3 Tariff Issues

A number of tariff issues are pertinent:

- there is a move towards the volumetric component of the water charge. Even so this will still only represent 60% of the water charge by the end of the price period. This compares with Coliban Water's 80% figure;
- The Plan proposes to move towards a common wastewater charge across the region from the current position that was inherited from the five previous water supply entities. Current charges vary from a low of \$355 to a high of \$530. Customers in Bairnsdale, on the lowest current charge, will see the largest rises as they move towards a common average charge. This approach appears sensible and equitable provided the transition path is realistic and gives customers time to adjust;

- The Water Plan opposes the introduction of an Inclining Block Tariff as average per capita consumption is already low at 195kL/head/year;
- The Water Plan also opposes the introduction of Guaranteed Service Levels arguing that they provide no additional incentive to improved performance

East Gippsland highlights the impact that the price increases will have on low income households. It proposes a pro-active program to contact "at-risk families' to help anticipate and minimise those impacts. This is approach is to be applauded.

8.4 Expenditure

Once again expenditure over the first price period was greater than that originally authorised, although not as extreme as with Coliban and Central Highlands. In this case \$38M was spent in comparison with the \$23.7M approved.

Total capital expenditure of \$67.3M is proposed over the five year period. The largest single item is the cost of a new major water treatment capability for the Mitchell River System. This will cost \$38M and has been necessitated by the major bush fires of 2006-07 that continue to sweep major pollution loads and suspended solids and sediment into the river causing high levels of turbidity.

In addition costs will be incurred in extending wastewater treatment capacity and in corporate initiatives.

9 Wannon Water

9.1 Water Plan Overview

Wannon Water services a large portion of south west Victoria, based on the urban centres of Warrnambool, Portland and Hamilton. It supplies 33,500 residential customers as well as 13 major industrial users including the Portland Smelter and several large dairy processing factories. In addition, it supplies some 1,800 farmers with either potable or raw water depending on location.

Wannon Water was formed on 1 July 2005 as an amalgamation of three smaller former water authorities:

- South West Water based in Warrnambool;
- Portland Coast Water based in Portland; and
- Glenelg Water based in Hamilton.

A significant part of the work program over the last two years has been involved in establishing the new business and building more professional approaches and systems to deliver higher standards of customer service and regulatory compliance. This will benefit customers over the longer term.

The other major cost driver has been responding to the drought in the Hamilton supply systems which has triggered the requirement for a new supply pipeline that represents the largest cost item in the new Water Plan.

9.2 Price Impacts and Price Paths

The only real point of issue in the Water Plan for CUAC relates to the highly complex tariff structure adopted.

Wannon Water inherited three different and complex pricing regimes with highly variable approaches to tariffs and pricing. A major part of the development of the Water Plan has involved developing a single, consistent tariff structure for the new larger region.

Prices are determined for each town to maintain a clear linkage between prices and the real costs of supply. That means that local communities cover the costs incurred in ensuring quality or security of supply for their own homes. So, for example, Table 9-1 shows that prices in Hamilton will rise by 104% over the five year period, while, by contrast, water customers in Warrnambool will se a more modest increase, of only 46%. This is because the major expenditure for the Water Plan involves construction of a new pipeline to service water customers in Hamilton.

The spread in prices changes is between 5.6% and 12.6% for water, with an average annual increase of 112.6%, while the figures for sewer are a minimum of 5% and a top of 20% with an average annual change of 9.3%.

							%
	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	Increase
Portland	\$683.88	\$683.88	\$778.04	\$887.22	\$1,014.11	\$1,161.87	70%
Warrnambool	\$725.20	\$799.83	\$856.74	\$918.12	\$984.32	\$1,055.76	46%
Hamilton	\$665.11	\$768.61	\$885.31	\$1,020.48	\$1,177.14	\$1,358.85	104%
Average	\$704.51	\$764.30	\$840.78	\$926.79	\$1,023.74	\$1,133.28	
Increase (\$)		\$59.78	\$76.49	\$86.01	\$96.95	\$109.54	
Increase (%)		8.5%	10.0%	10.2%	10.5%	10.7%	

Table 9-1: Wannon Water – Increase in Bill for 250kl	/vr household: 3 Centres (\$)
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The contribution of the different component elements of the tariff for residential customers is illustrated in Table 9-2 for households in Hamilton consuming 250kL/yr.

	08-09	09-10	10-11	11-12	12-13
Fixed Water	115.47	130.09	146.56	165.12	186.02
tier 1	1.30	1.46	1.64	1.85	2.09
tier 2	1.55	1.75	1.97	2.22	2.50
Variable	347.17	391.13	440.64	496.43	559.27
Total Water	462.65	521.22	587.21	661.55	745.30
Sewer	305.96	364.09	433.27	515.59	613.55
Total	768.61	885.31	1,,020.48	1,177.14	1,358.85
Increase (\$)		116.70	135.16	156.66	181.71
Increase (%)		15%	15%	15%	15%

 Table 9-2: Wannon Water – Increase in Bill for 250kL/yr Hamilton household (\$)

The tables also illustrate a stable price path over the five year period, even though this does mean that prices at the end of the period will be higher than strictly necessary going forward and so customers may see a price reduction at the start of the next price period.

9.3 Tariff Issues and Hardship Policy

The above section confirms that prices have been determined for each town to retain strong link between costs of service and charges. That is an admirable principle. The Board of Wannon Water was apparently concerned to ensure that the amalgamation of the three businesses was not seen as an attempt to load costs onto water customers in Warrnambool for previous under investment in the other major centres.

In practice, however, the approach leads to extremely complex tariffs with considerable disparity between neighbouring towns. This is a counter direction to most water businesses which are increasingly averaging costs and charges over larger areas on an equity principle that customers should largely pay the same charges for roughly the same quality of service.

The other broad principle followed was to avoid price shocks to customer groups. This led to a cap on the maximum changes in charges between years and also to a smoother price path with equal changes between years.

Other relevant tariff issues include:

 adoption of a standard set of pricing principles in place of the previous differential approaches;

- a movement away from fixed charges towards volumetric elements, ie from 50% of the average bill to 70%;
- retention of the three tier water tariff with a discounted price for the first tier to protect low income families;
- removal of the volumetric sewer charge that had applied solely in Portland.

The Water Plan highlights the importance of the company's hardship policy in dealing with increased pressures on lower income families. The Water Plan identifies a pro-active suite of measures to respond:

- Wannon Water will directly correspond with all customers who are tenants holding concession cards, to outline the changes to the volumetric charges and advise of the avenues of assistance available if needed;
- Wannon Water will pay for an audit of high residential water users in financial hardship and contribute to the costs of retrofitting water saving measures such as low flow showerheads;
- The tiered water pricing scheme provides the base water demand at a lower unit cost;
- Wannon Water will not apply the third tier price for consumption above 75 kilolitres per quarter for families in hardship;
- Where families can demonstrate that they have genuine financial hardship Wannon Water will share the costs of that bill. Provided that a customer makes three payments in line with an instalment schedule, then Wannon Water will make the fourth payment on their behalf.

This appears an admirable suite of measures that anticipates and responds to predicted demand for additional services.

9.4 Expenditure & revenue

There are five major capital expenditure initiatives:

- The new pipeline to Hamilton: at \$33.4M
- a new head office building for the new water business: at \$7.3M
- a replacement wastewater treatment works at Portland: at \$6.7M
- a new pipeline to service Coleraine: at \$3.37
- expansion of the wastewater treatment works at Warrnambool: at \$3.3M

The costs of these works is then reflected in the increased 'return on assets' and depreciation in the revenue requirement over time (Table 9-3).

Table 9-3:	Revenue	Requirement
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	08-09	09-10	10-11	11-12	12-13
Capital expenditure	\$25.16	\$43.80	\$12.82	\$16.77	\$11.54
Operating expenditure	\$33.85	\$33.20	\$34.50	\$33.95	\$33.51
Return on Assets	\$7.24	\$8.39	\$9.25	\$9.63	\$10.02
Depreciation	\$4.53	\$4.37	\$4.72	\$4.78	\$4.93
Total	\$45.62	\$45.96	\$48.47	\$48.36	\$48.46

Otherwise the major drivers of revenue are from operating expenses. These are raised from the sum of the previous three businesses to reflect the costs of establishing and running a more professional standard of service and are then fairly stable throughout the price period. Some of that revenue requirement involves a price adjustment from the first price period to cover:

- a return on higher than anticipated capital expenditure
- operating expenditure that is now higher than the aggregate of the three former water authorities;
- recovery of lost revenues.

This is one area where it would be appropriate for the ESC to establish a broad principle as there is considerable disparity between the approaches adopted by different water companies. The most obvious example is that Barwon Water is proposing not to try and recover revenue 'lost' due to lower demand in the first price period.

Recommendation: that a simpler tariff structure be developed with broad bands to reflect those customers that receive broadly similar levels of service.

10 Western Water

10.1 Water Plan Overview

Western Water services the major growth areas to the west of Melbourne. This is the fastest growing region in Victoria and is centred around the four cities of Melton, Sunbury, Bacchus Marsh and Gisborne. These house 51,000 customers (95% residential) in an area of 3,000km². It is interesting to compare this with East Gippsland Water which serves 20,000 customers in an area of 21,000km².

The region has also suffered from extended drought over the last five years. It used to be able to rely on its own local reservoirs and those managed by Southern Rural Water. However, the greatly reduced catchment yield has forced the need for the interconnection between Western Water and the Melbourne Water supply systems from the Yarra catchment. 90% of customers are now linked to the Melbourne System.

10.2 Prices and Price Path

The Water Plan involves an increase in an average bill for 250kL/yr from \$745 to \$1,133, ie an increase of \$387 or 52% over the five year period (Table 10-1). That is equivalent to an annual increase of 8.74%.

	07-08	08-09	09-10	10-11	11-12	12-13
Fixed water	135.32	158.32	179.70	202.16	226.42	251.33
tier 1 c/kL	0.83	0.98	1.11	1.24	1.39	1.54
tier 2 c/kL	0.98	1.30	1.47	1.65	1.84	2.05
Vol Water	221.38	273.80	309.39	346.52	388.10	430.80
Total water	356.70	432.12	489.09	548.68	614.52	682.12
Sewer	389.12	400.79	412.82	425.20	437.96	451.10
Total	745.82	832.92	901.91	973.88	1,052.48	1,133.22
Increase \$		87.10	68.99	71.97	78.60	80.74
Increase %		11.7%	8.3%	8.0%	8.1%	7.7%

Table 10-1: Western Water – Increase in Bill for 250kL/yr household (\$)

The relative changes in the different components of the total tariff are explored in Table 10-2. This confirms sewer charges going up merely by 3%/yr while water charges go up by 13.8%/yr. The table also shows that a greater share of the increase is borne by the volumetric compared with the fixed water charges.

Table 10-2: Westerr	n Water – Increase ii	n Bill by component (\$)
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	07-08	12-13	Increase	%	Average annual %
Fixed water	135.32	251.33	116.01	86%	
Vol water	221.38	430.80	209.42	95%	
Total water	356.70	682.12	325.42	91%	13.8%
Sewer	389.12	451.10	61.98	16%	3%
Total	745.82	1133.22	387.40	52%	8.74%

10.3 Tariff Issues & Hardship Policy

The Water Plan includes a number of pertinent tariff proposals:

- Retention of a three tier inclining block tariff, with the second tier set at 160kL/yr with a 30% increase in the tariff. The company have strong market research to support the level of this tariff;
- A claimed increase in the relative weight of the volumetric element in the water tariff although this is pretty marginal with an increase only from 62.1% to 63.2%;
- A reduction in the level of wastewater charges over the five years, through a reduced rate of increase/year as noted above, to achieve greater cost reflective pricing;
- Introduction of five Guaranteed Service Level payments for the first time. This brings Western Water in line with the three metropolitan retailers – despite the expressed opposition from customer consultative groups;
- Western Water has long been a leader in recycled water products and services. Being an innovator in this field, many of the early contracts were less commercial than current practice. Western Water is proposing to wind back the current cross-subsidies from the wider customer base over the period of the Water Plan;
- New dual pipe residential developments are being widely supplied with recycled water for garden watering etc. Here the tariff is set at the same level as tier 1 of the potable water tariff.

The Water Plan also provides for explicit hardship policies to counter the effects of the proposed price increases. These are similar in effect to those proposed by Wannon Water, with exemptions from higher tiers of the water tariffs and enhanced contact with low income families. This is welcomed.

10.4 Expenditure and Revenue

Western Water is proposing capital expenditure of \$128.59M over the five years of the Water Plan. The largest category of investment is in provision of additional sewerage services to growth areas. This represents 45% of total expenditure, while water supply augmentation requires 29% and recycled water merely 11%. There are also proposals to expand bio-solids reuse from wastewater recycling plants at a cost of \$3.3M.

This generates an overall revenue requirement of \$286.43M, of which Operating Expenditure represents 72%, at \$207.25M (Table 10-3).

	08-09	09-10	10-11	11-12	12-13
Operating expenditure	32.99	36.44	40.1	45.7	52.02
Return on old assets	7.49	7.3	7.1	6.91	6.71
Depreciation on old	3.02	3.02	3.02	3.02	3.02
Return on new assets	0.87	2.47	3.68	4.45	4.98
Depreciation on new	0.36	1.04	1.56	1.92	2.18
Тах	0.37	0.72	1.02	1.35	1.6
Total	45.1	50.99	56.48	63.35	70.51

50% of that Operating Expenditure represents the costs of purchasing water from Melbourne Water and Southern Rural Water. This line also includes the higher financing costs of increased debt generated by the loss of revenue in the first price period due to water restrictions and lower demand.

Western Water is the only regional water business liable for tax in Victoria.