



In reply please quote: C2012/10560
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28 September 2012

Mr Marcus Crudden
Acting Director, Water
Essential Services Commission
2/35 Spring Street
Melbourne 3000

Dear Marcus

RE: WANNON WATER'S WATER PLAN 2013-18

Please find attached Wannon Water's Water Plan 2013-18 submitted in accordance with the Commission's requirements. Over the five years of the Water Plan 3 regulatory period, Wannon Water requires a total revenue requirement of \$331M, an average of \$66.2M per year. This level of revenue requirement enables Wannon Water to pass on real 1% reduction in revenue via water and sewerage price reductions for nominated tariff groups and no real increase in water and sewerage charges for all customers over Water Plan 3 regulatory period

Wannon Water commends the plan to you and please do not hesitate to contact Damian O'Doherty, General Manager Regulation should the Commission have any queries and for subsequent liaison of audit reviews.

Yours sincerely

Grant Green
Managing Director





WATER PLAN

2013-2018





Report Name: Wannon Water:
Water Plan for 2013 to 2018
Date: 28 September 2012

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PO Box 1158, Warrnambool 3280
28 September 2012

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I INTRODUCTION

Wannon Region Water Corporation (“Wannon Water”) prices and service standards have been regulated by the Essential Services Commission (“the Commission”) since 1 July 2005. Wannon Water is in its second regulatory period which is for the five year period commencing 1 July 2008 and ending 30 June 2013 (referred to as “Water Plan 2”).

This Water Plan has been prepared for the third regulatory period commencing 1 July 2013 and ending five years later on 30 June 2018 (referred to as “Water Plan 3”).

Water Plan 3 Discussion Papers were prepared and released to Wannon Water’s customers, regulators and other stakeholders seeking feedback on pricing options and service standards proposals under consideration for inclusion in the Water Plan 3 submission to the Commission for authorisation.

This Water Plan 3 sets out:

- An overview of Wannon Water
- Outcomes achieved during the Water Plan 2 regulatory period
- Service levels proposed for the Water Plan 3 regulatory period
- Revenue requirement for the Water Plan 3 regulatory period
- Capital and operating expenditure requirements for the Water Plan 3 regulatory period
- Demand forecasts for the Water Plan 3 regulatory period
- Prices and pricing structures for the Water Plan 3 regulatory period

1.1 WANNON WATER – OVERVIEW

Wannon Water is a regional urban water corporation owned by the Victorian State Government and established under the *Water Act 1989*.

Our mission is to provide secure, safe, reliable, and innovative integrated water services to communities in South West Victoria.

Our service area extends over 23,500 square kilometres making us the second largest regional urban water corporation in Victoria by area. The Warrnambool City, Corangamite Shire, Glenelg Shire, Moyne Shire and Southern Grampians Shire Councils are all within our service area. The services provided by Wannon Water support industry, residential, commercial and rural customers, and a permanent population of around 80,000 people.

Wannon Water supplies on average more than 10,000ML of water per year from a diverse range of water supplies, including surface water catchments, geothermal groundwater and shallow groundwater systems. Our asset base has a book value of \$560 million and includes pipelines, reservoirs, water treatment plants, water reclamation plants and recycled water plants.

Wannon Water plans to invest \$109.04 million in capital works during 2013-18 to maintain service levels, and manage some \$216.54 million of operating expenditure over this time period. Wannon Water directly employs more than 200 people across South West Victoria.



1.2 WANNON WATER – FUTURE DIRECTIONS

Wannon Water's vision is to be recognised for excellence in integrated water services

Wannon Water regards excellence as delivering secure, safe and affordable integrated water services that are highly valued by our customers and aligned with the strategic priorities of our shareholder, the Victorian Government. The people who make up Wannon Water share a common set of values that enable us to work effectively towards our vision, empowering each other to achieve excellence.

Wannon Water understands that clear objectives, backed up by robust planning, prudent investment and innovation will increase the efficiency of the business and deliver our vision, ensuring our prices remain fair for our customers whilst maintaining a viable business.

2 EXECUTIVE SUMMARY

2.1 INTRODUCTION

2.1.1 WATER PLAN 1

In Water Plan 1 (2005-08) Wannon Water completed the merger of three former water authorities' assets, systems and resources. The pricing of tariffs was consistent with the three

Water Plan pricing determinations made by the Commission on the Water Plans submitted by the former authorities (Glenelg Water, Portland Coast Water and South West Water).

2.1.2 WATER PLAN 2

Water Plan 2 was a period of development of infrastructure and consolidation of Wannon Water as a merged entity. It was a period of bringing the infrastructure requirements up to a suitable standard, including the Portland Bores, providing water security to Hamilton via the Hamilton-Grampians Pipeline and the upgrading of assets for regulatory compliance.

Furthermore, Wannon Water acquired the resources (both human and capital) to maintain the levels of service and meet its statutory obligations. This focus on building the Corporation meant that substantial funds were needed, which in turn required annual real increases in water and sewerage prices.

Building on these achievements over Water Plan 1 and the first four years of Water Plan 2, Wannon Water is focused on efficiency improvements and delivering value for money for its customers whilst maintaining the agreed levels of service.

To this end, Wannon Water reduced the authorised increase in water and sewerage prices by 1% across all water and sewerage tariffs in the 2012-13 year (being the last year of Water Plan 2). This had the effect of removing approximately \$585,000 permanently from not only 2012-13 revenue, but also from each and every year in the future.

2.1.3 WATER PLAN 3

For the Water Plan 3 regulatory period Wannon Water will continue to focus on delivering value to its customers. Further efficiencies enable Wannon Water to pass on a further 1% reduction in revenue in real terms from 2013-14, the first year of Water Plan 3. This second tranche of revenue reduction has been allocated to reducing the higher water and sewerage

tariffs. Consequently, over \$1M revenue requirement has been removed from each and every year of Water Plan 3. Further value will be passed on to customers by holding water and sewerage prices constant in real terms over the Water Plan 3 regulatory period.

2.2 OVERVIEW OF THE REVENUE REQUIREMENT AND PROPOSED ANNUAL PRICE CHANGES

Over the 5 years of the Water Plan 3 regulatory period Wannon Water requires a total revenue requirement of \$331M, an average of \$66.2M per year. This level of revenue requirement enables Wannon Water to pass on a real 1%

reduction in revenue via water and sewerage price reductions for nominated tariff groups and no real increase in water and sewerage charges for all customers over the Water Plan 3 regulatory period.

2.3 OVERVIEW OF THE KEY WATER PLAN 3 OUTCOMES

The key outcome for the Water Plan 3 regulatory period is maintaining a financially viable business and delivering value to customers. Wannon Water will achieve this by holding water and sewerage prices constant in real terms except for two water tariff groups and one sewerage price group which are reduced in 2013-14 compared to 2012-13.

Wannon Water will maintain service standards consistent with its performance over the past five years. Wannon Water has achieved very high levels of customer satisfaction during the Water Plan 2 regulatory period and expects this to continue throughout the Water Plan 3 regulatory period.

A major input to maintaining service standards is the capital works program as asset replacement and asset refurbishment make up 45.2% of the total \$109.04M capital expenditure. The three largest projects however are all regulatory compliance projects. These projects are the Heywood Water Reclamation Plant and Irrigation Works (\$4.80M), the Hamilton Water Reclamation additional winter storage lagoon (\$3.77M) and the installation of a clarifier at the Casterton Water Treatment Plant (\$3.19M).

2.4 OVERVIEW OF EXPENDITURE FORECASTS

Expenditure forecasts for the five years of the Water Plan 3 regulatory period have been prepared on the basis of consistency in real terms with expenditure incurred during the 2012-13 financial year. The exceptions to this are outlined in section 6 and include increases in costs associated with the Environmental Contribution, electricity, superannuation, additional obligations and operating new infrastructure.

Wannon Water passes the Commission's 1% productivity hurdle in all years of the Water Plan regulatory period and overall. Consequently after allowing for the expected growth in customer numbers Wannon Water's operating costs decline by more than 1% in each year of the Water Plan 3 regulatory period.

2.5 OVERVIEW OF PROPOSED TARIFF STRUCTURES

2.5.1 URBAN WATER AND SEWERAGE TARIFFS

Wannon Water's consultation on the Water Plan 3 Discussion Papers found that most residential customers were happy to continue with the tiered water usage charge. In addition, the merger of some water and sewerage tariff groups was endorsed by customers provided there was no real impact on future price adjustments for other tariff groups.

Wannon Water has reduced pricing complexity by merging the existing Water Tariff Groups 1 and 2 and merging Sewerage Tariff Groups 1, 2 and 5.

In addition the reduced revenue requirement in 2013-14 derived from efficiency savings has been allocated to Water Tariff Groups B and D (formally Groups 3 and 5) by reducing the fixed water service tariffs by \$20 and \$30 respectively.

For sewerage tariffs Group A (formally Groups 1, 2 and 5) will benefit by the average residential customer sewerage tariff being reduced by approximately \$15 per year in 2013-14.

2.5.2 TRADE WASTE PRICES

Most trade waste prices increase by 2% real over the 5 years of the Water Plan 3 regulatory period.

Minor trade waste service fees for customers not required to install pretreatment equipment reduce by 50% from 2013-14.

Other adjustments were made to minor trade waste volume charge thresholds and to the volume charges in some minor trade waste groups in the interests of equitable pricing.

2.5.3 RURAL WATER TARIFFS

Rural water tariffs will not increase in real terms over the 5 years of the Water Plan 3 regulatory period.

2.5.4 MISCELLANEOUS CHARGES

Wannon Water has extensively reviewed all miscellaneous charges to align charges with the current actual cost of providing the service. The main change is that the price of Information Statements has been significantly reduced.

2.6 OVERVIEW OF CUSTOMER CONSULTATION

Wannon Water's customer consultation strategy for Water Plan 3 was founded on proactive engagement – providing clear information, facilitating discussion and using new ways to encourage customer and stakeholder input. To accommodate the needs and expectations of our customers, emphasis was placed on 'tapping' into existing community/special interest group meetings, web-based surveys, increasing website traffic use and providing updates on billing notices.

Existing resources significantly value added to our decision making process, with the Customer Engagement Committee and regular community newsletters being central to the process. Communicating with customers in a way that was

both meaningful and convenient for them has significantly increased public input and raised community awareness than for Water Plan 2.

The stated intention to not increase price in real terms throughout the regulatory period allowed Wannon Water to put greater emphasis on other aspects of Water Plan including service standards and capital projects. Customers were largely supportive of the proposals and options put forth in the Water Plan 3 Discussion Papers. A detailed overview of the consultation program and outcomes is provided in Section 5.

2.7 SERVICE STANDARDS

Wannon Water's service standards have been marginally adjusted, generally based on actual performance in the delivery of services to customers over the past 5 years. Customer satisfaction surveys indicated a high level of customer satisfaction with the services delivered by Wannon Water:



3 OUTCOMES FOR WATER PLAN 2

3.1 INTRODUCTION

The primary objective of Wannon Water in the Water Plan 2 regulatory period was to deliver the agreed levels of service to customers in a cost efficient and financial sustainability manner. Wannon Water achieved this primary objective by meeting its

service level targets while operating the business within the operational and capital works expenditure projections set out in Water Plan 2.

3.2 SERVICE STANDARDS

The service standard targets were consistently achieved except for unaccounted for water and complaints referred to the Energy and Water Ombudsman Victoria.

Overall customer satisfaction with the levels of service provided by Wannon Water was exceptionally high within the range of 91% to 96% as measured by independent annual surveys of residential and business customers. Refer Appendix

A for Customer Service Standard Performance Table and further commentary.

Wannon Water also met its own performance targets for greenhouse gas emission reduction, water recycling, biosolids re-use and customer complaints. Refer **Appendix B** for Other Standards and Commentary – Water Plan 2.

3.3 WATER DEMAND

Actual demand for water in the first 4 years of the Water Plan 2 regulatory period was less than that forecast by Wannon Water.

3.3.1 FORECAST WATER DEMAND

In 2008-09 Wannon Water forecast water demand of 12,349 ML (page 108 Wannon Water's Water Plan 2008-13) and further forecast that demand for water would reduce by

0.49% per year over the remaining 4 years of the Water Plan 2 regulatory period.

This forecast significantly overstated actual demand.

3.3.2 ACTUAL WATER DEMAND

In 2008-09 actual water demand was 12,142ML which was 1.6% (209ML) less than the Water Plan 2 forecast. In the following 3 years to 30 June 2012 actual demand further reduced year on year by an average of 2.03% to 11,402ML in 2011-12.

In nominal dollars this total shortfall in water demand translated to a reduction in water sales revenue of \$7.8M for the first 4 years of the Water Plan 2 regulatory period.

Figure 3 – 1 Estimated and Actual Water Consumption shows the estimated and actual water consumption over Water Plan 2 to 2011-12.

Demand is discussed further in Section 7: Demand Forecasts.

Refer Appendix C – Historic Demand Water Plan 2 for a tabular breakdown of the decline in water demand.

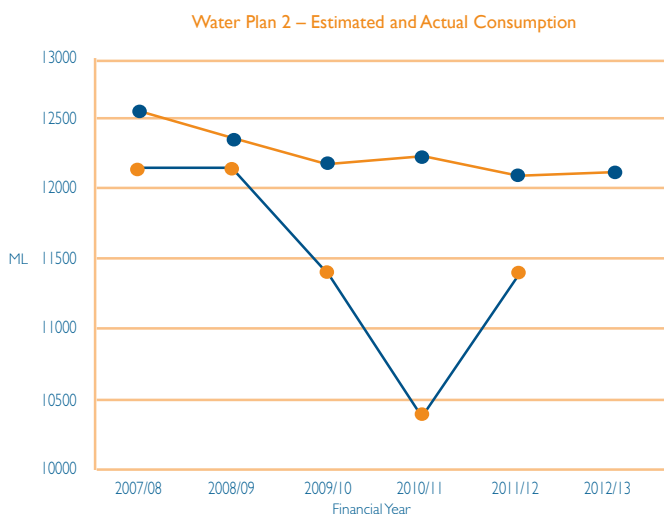


Figure 3-1 Estimate and Actual Water Consumption

3.3.3 RESIDENTIAL WATER USAGE DECLINE

Water Plan 2 was based on average residential household demand of 182kL per year. For the average household the ratio of the fixed water service charge to tiered water usage tariffs was priced to generate 70% of residential water revenue from water usage charges and 30% from fixed water service charges; (50:50 ratio for residential customers in those towns mostly comprised of holiday homes or with a tradition of large rainwater tanks).

Residential customer demand changed dramatically over the first 4 years of the Water Plan 2 regulatory period with average residential consumption per household declining to 134kL per year in 2010-11. The return to more normal weather patterns and the ending of the drought has seen a

modest “bounce back” in average household consumption to 148kL per household in 2011-12.

The decline in household demand impacted the planned ratio of 30% fixed water service charges to 70% usage charges. The actual ratio in 2011-12 was 35.7% water service charges and 64.3% usage charges. Holiday and traditional “tank” towns ratio was 60.8% service charges and 39.2% usage charges.

Refer – Appendix C –Historic Demand Water Plan 2 for further detail.

3.3.4 TIERED WATER USAGE TARIFF IMPACTS

	First Tier	Second Tier	Third Tier	Average kL per household
Planned percentage	54%	29%	17%	182

Table 3-1 Planned Percentage Revenue per Tier

The actual outcome over the 4 years to date of Water Plan 2 is reflected in Table 3-2 Actual Percentage Revenue per Tier.

	First Tier	Second Tier	Third Tier	Average kL per household
2008-09	68%	20%	12%	164
2009-10	71%	19%	10%	153
2010-11	76%	17%	7%	135
2011-12	70%	19%	11%	148

Table 3-2 Actual Percentage Revenue per Tier

It will be observed that as household usage decreased in the first three years, a greater proportion of the revenue was collected from the Tier 1 price. The increase in consumption in the fourth year of Water Plan 2 compared to the prior years reflects a modest shift to the second and third tier.

The effect of reduced household consumption is that most residential water usage was supplied at the Tier 1 discounted price of 17% compared to the Tier 2 standard price. In addition, less usage occurred at the Tier 3 price which has a premium of 50%.

The overall revenue loss associated with the reduction in residential water demand to 30 June 2012 was \$7.8M. The shift in volume sales by Tariff Water Price Group and Tiers is shown in percentage terms in **Appendix D**.

Refer – Appendix D – Inclining Block Tariff Collection Outcomes – Water Plan 2.



3.3.5 CUSTOMER CONNECTION GROWTH RATES

Water Plan 2 forecast a modest growth rate of 0.84% per year in total customer connections. The actual annual growth rate for the first 4 years of the Water Plan 2 regulatory period

was 1.03%, which represents an additional 1,729 property connections over the four years, an average of 432 additional properties per year.

3.3.6 TRADE WASTE REVENUE IMPACTS

Water Plan 2 forecast that trade waste revenue would increase by 8% per year. Actual trade waste revenue for the first 4 years of the Water Plan 2 regulatory period was \$19.2M, \$9.02M more than forecast.

Most of the additional trade waste revenue was unregulated revenue, derived from entering into an agreement to receive brine transported over long distances by vehicle for treatment at the Warrnambool water reclamation plant.

3.4 REGULATED REVENUE AND OPERATING EXPENDITURE

3.4.1 REGULATED REVENUE

Table 3-3 Comparison of Revenue Requirement against Revenue Achieved shows Wannon Water's performance in achieving its prescribed revenue. The table also demonstrates the revenue impacts from averaging tariff increases over 5 years which generated a steady revenue increase and avoided

a price shock to Wannon Water customers. The actual revenue in 2011-12 and 2012-13 is expected to offset the \$9.71M revenue shortfall in the first 3 years of the Water Plan 2 regulatory period.

	2008-09 (\$M)	2009-10 (\$M)	2010-11 (\$M)	2011-12 (\$M)	2012-13 (\$M)
Revenue Requirement	47.34	49.35	53.48	55.30	56.49
Actual Revenue	41.67	46.43	52.51	63.35	N/A*
Variance	(5.67)	(2.92)	(0.97)	8.05	N/A*

*Not yet available

Table 3-3 Comparison of Revenue Requirement against Revenue Achieved

Actual revenue in 2011-12 was greater than the projected revenue requirement in Water Plan 2 even though actual water demand was less than that projected in Water Plan 2. This was due to customer growth exceeding the Water Plan 2 estimate

by some 378 additional water customers and 1,150 additional sewer customers as at 30 June 2012. Trade waste revenue was also \$3.43M more than that projected in Water Plan 2.

3.4.2 OPERATING EXPENDITURE

Table 3-4 Comparison of Projected Operating Expenditure in Water Plan 2 to Actual Expenditure shows that Wannon Water was efficient at keeping expenditure below budgeted

expenditure set out in Water Plan 2 for the first three years of the Water Plan 2 regulatory period.

Expenditures	2008-09 (\$M)	2009-10 (\$M)	2010-11 (\$M)	2011-12 (\$M)	2012-13 (\$M)
Projected Expenditure	33.49	33.42	35.82	36.39	36.51
Actual Expenditure	33.06	32.80	34.29	38.79	N/A*
Variance	0.43	0.62	1.53	(2.40)	N/A*

*Not yet available

Table 3-4 Comparison of Projected Operating Expenditure in Water Plan 2 to Actual Expenditure

Operating expenditure exceeded Water Plan 2 forecasts for the first time in 2011-12. Areas of costs that contributed to the variance in 2011-12, also exceeded projections during the 2008-09 to 2010-11 period. However, these were more than offset by the decrease in demand for water and Wannon Water's ability to identify operating cost efficiencies throughout the 2008-09 to 2010-11 period.

In addition, a number of one-off projects and the beginning of ongoing programs contributed to actual expenditure exceeding Water Plan 2 projections in 2011-12. Due to ongoing projects and increasing pressures on costs outside of Wannon Water's control (ie increasing electricity costs, the introduction of the Carbon Tax), it is expected that 2012-13 costs will exceed the 2012-13 projection.

3.4.2.1 INFORMATION TECHNOLOGY COSTS 2008-13

Information technology operating expenditure during the Water Plan 2 regulatory period to 2011-12 increased significantly consistent with Water Plan 2 projections. This is due to:

- An increase of \$0.73M in the cost of software application licenses, support and maintenance fees. Wannon Water actively identified key infrastructure and applications and implemented support and maintenance agreements. Support and maintenance agreements are one of the key mechanisms in ensuring maximum uptime for all systems. The implementation of such agreements accounted for a significant proportion of the increase in license fees. In addition, an increase in core infrastructure requirements, growth in applications and associated databases resulted in additional license fees and support and maintenance agreements.
- An increase \$0.14M in the cost of resources. Additional resources were allocated to increase capability and alleviate risks identified in maintaining Wannon Water's growing infrastructure and application portfolio. The additional two information technology employees during the second regulatory period were employed to address IT security, disaster recovery, support for mobile infrastructure, SCADA and the IT network

No additional I.T. infrastructure, applications or resources will be required in the Water Plan 3 regulatory period. As such, IT operating costs are planned to remain relatively constant each year of the next regulatory period. Core IT infrastructure has been implemented over the course of Water Plan 1 and 2. Technical infrastructure is a key strength of the organisation and its development has been the focus of projects during the Water Plan 2 regulatory period. Efforts during the Water Plan 3 regulatory period will be focused on increasing the efficiency and effectiveness of current IT infrastructure and applications.

The figures in Table 3-5 Actual Information Technology Operational Expenditure include employee costs, license fees and IT consumables.

Expenditures	2008-09 \$M	2009-10 \$M	2010-11 \$M	2011-12 \$M	2012-13 \$M
Projected Operating Expenditure	1.47	1.73	1.73	2.21	2.16
Actual Expenditure (\$M)	1.52	1.45	1.91	2.15	N/A*
Variance	0.05	(0.28)	0.18	(0.06)	N/A*

* Not yet available

Table 3-5 Actual Information Technology Operational Expenditure



3.5 ACTUAL CAPITAL EXPENDITURE (IN NOMINAL DOLLARS)

Actual capital expenditure over Water Plan 2 is shown in Table 3-6 Actual Capital Expenditure.

Expenditures	2008-09 \$M	2009-10 \$M	2010-11 \$M	2011-12 \$M	2012-13 \$M
Projected Capital Expenditure	47.39	38.33	17.41	18.63	17.19
Actual Capital Expenditure	29.03	41.85	18.06	20.04	N/A*
Variance	(18.36)	3.52	0.65	1.41	N/A*

* Not yet available

Table 3-6 Actual Capital Expenditure (Nominal Dollars)

For the four years to 30 June 2011 actual capital expenditure was \$12.78M less than forecast in Water Plan 2. This was primarily due to a nominal \$9M saving on the construction of the Hamilton-Grampians pipeline, abandoning projects no longer required and a VCAT hearing delay. The savings have been reallocated to projects being undertaken in 2012-13.

Wannon Water forecasts expenditure in 2012-13 of \$29.45M which will match total capital expenditure projected in Water Plan 2.

3.6 DELIVERY OF KEY CAPITAL PROJECTS

The progress to date in completing the largest capital projects for Water Plan 2 regulatory period is shown in Table 3-7 Status of Major Capital Projects.

Description	Value (Jan-07 dollars)	Actual Status as at 30 June 2012	Projected Status as at 30 June 2013
Hamilton Water Supply Augmentation	\$33.40M	Completed	Completed
Warrnambool Office Building	\$7.33M	Completed	Completed
Warrnambool Aerobic Digester Cell	\$6.75M	Deferred to Water Plan 4 due to reduced treatment loads associated with reduction in water consumption	Deferred to Water Plan 4
Portland Water Reclamation Plant Upgrade	\$6.72M	Under construction	Completed
SCADA System	\$4.73M	Nearing Completion	Completed
Casterton - Coleraine Pipeline	\$3.37M	Completed	Completed
Dutton Way Water Scheme	\$2.05M	Scheme rejected by property owners	Project deleted
West Portland Sewerage Scheme	\$1.73M	Under construction	Completed
Camperdown Rural Water Main Replacements	\$1.67M	Completed	Completed

Table 3-7 Status of Major Capital Projects

3.7 DROUGHT MANAGEMENT

3.7.1 WATER SUPPLY SYSTEMS

During the Water Plan 2 regulatory period, Wannon Water's water supply systems were resilient to drought conditions, except for a period where water restrictions applied in the

Hamilton, Balmoral and Glenthompson water supply systems. Permanent Water Saving Rules now apply in all water systems.

3.7.2 WATER RESTRICTIONS

Table 3-8 History of Water Restrictions sets out the history of water restrictions in the Water Plan 2 regulatory period.

Date	System	Stage	Action
12/11/2005	Glenthompson	1	Introduced
21/01/2006	Hamilton*	1	Introduced
1/04/2006	Hamilton*, Balmoral & Glenthompson	2	Introduced
14/10/2006	Balmoral & Glenthompson	4	Introduced
4/11/2006	Hamilton*	3	Introduced
5/12/2006	Hamilton*	4	Introduced
3/11/2007	Hamilton*	3	Reduced from Stage 4
3/11/2007	Glenthompson	2	Reduced from Stage 4
4/10/2009	Balmoral & Glenthompson	4 & 2	Lifted
1/11/2009	Hamilton*	2	Reduced from Stage 3
1/08/2010	Hamilton*	2	Lifted

* Reference to Hamilton includes Cavendish, Dunkeld and Tarrington

Table 3-8 History of Water Restrictions

3.7.3 LIFTING OF WATER RESTRICTIONS - HAMILTON SYSTEM

Various levels of water restrictions were in force from 21 January 2006 to 1 August 2010.

Construction of the Hamilton-Grampians Pipeline, connecting the Hamilton system reservoirs to Rocklands Reservoir;

was completed on time and below budget in June 2010.

To complement this project an additional 2000ML Bulk Entitlement was purchased from the Glenelg System operated by GWMWater at a cost of \$2,750 per ML.

3.7.4 LIFTING OF WATER RESTRICTIONS – GLENTHOMPSON SYSTEM

Various levels of water restrictions were in force from 15 November 2005 to 4 October 2009.

The Glenthompson water supply is sourced from a local catchment and via a pipeline connection to the Willaura system operated by GWMWater.

Wannon Water's historical supply of water by agreement from the Willaura system was converted to a 58ML Bulk Entitlement in 2012.

3.7.5 LIFTING OF WATER RESTRICTIONS – BALMORAL SYSTEM

Various levels of water restrictions were in force from 1 April 2006 to 4 October 2010.

Balmoral is supplied with water via a Bulk Entitlement from the Glenelg System (Rocklands Reservoir) operated by GWMWater.



4 WATER PLAN 3 REGULATORY PERIOD

4.1 REGULATORY PERIOD LENGTH

Wannon Water considers that a 5 year regulatory period is suitable in the current environment on account of the current uncertainty of world financial markets and potential impacts on the regional economy of south west Victoria. In particular, the local export driven dairy, aluminium and mineral sands processing industries. Five years is sufficient time for the regional economy to undergo significant change.

A 5 year determination period will provide certainty of prices over the regulatory period, but also mitigates the potential risk to revenue requirements should the local economy suffer a downturn.

4.2 PRICE CAP

A price cap regime is favoured by Wannon Water as this provides pricing certainty for our customers' year on year. Should the local economy be adversely impacted by world

The principal financial risk is change in the demand for water over time. Demand for water reduced significantly in the Water Plan 2 regulatory period due to a change in consumer water use. The prognosis is for continuing conservative consumptive patterns. Even with an easing of the climatic conditions it is unlikely that there will be a significant further "bounce back" in consumption. This aspect is considered further in Section 7.

financial market turmoil resulting in reduced water demand, this risk can be mitigated by restricting the regulatory period to a maximum of 5 years.

4.3 DETERMINATION REOPENING

Wannon Water considers the arrangements in place and the criteria to reopen the second pricing determination were satisfactory and should continue to apply for the Water Plan

3 determination. Wannon Water supports the Commission's position as stated in its Guidance Paper:

4.4 CUSTOMER TARIFF CHOICE

Wannon Water canvassed the concept of offering customers the choice of a range of tariff pricing plans with its Customer Engagement Committee. It was explained to the Committee that a default price plan would apply if customers failed to nominate their preferred pricing plan.

Several price plans which varied the price of a unit measure of water supplied and the service fee were canvassed. It was also made clear that default price plan customers were not to be disadvantaged by other customers' choices.

After careful consideration the Customer Engagement Committee likened the potential outcome to the bewildering array of mobile telephone price plans. The Committee also

concluded that scarcity pricing was not relevant to Wannon Water customers given that most customers had never experienced any water restrictions. The Committee concluded that the marginal customer benefit of offering tariff choice did not warrant the cost of development and implementation of tariff choice options and may create general angst for many customers.

Consequently, Wannon Water informed the Customer Engagement Committee that it would forgo offering tariff choice options in Water Plan 3 and will monitor the outcome of any other Water Corporation offering tariff choice to customers.

5 SERVICE OUTCOMES FOR WATER PLAN 3

5.1 INTRODUCTION

Wannon Water's proposed service outcomes for Water Plan 3 have been derived having regard to:

- The Statement of Obligations issued by the Minister for Water
- Compliance with laws and regulations
- The guidance provided for Water Plan 3 by regulators

- The views and needs of customers
- Maintenance of financial viability
- Customer satisfaction with existing service levels

Key aspects in relation to the derivation of the service outcomes are explained in the following sections.

5.2 CUSTOMER CONSULTATION

Engaging with our customers and major stakeholders are business as usual at Wannon Water and a key component of its robust decision making process. This commitment is embedded in Wannon Water's Stakeholder Engagement Strategy and Customer Engagement Guidelines.

A comprehensive Water Plan Consultation Program endorsed by the Board of Directors in August 2011 was implemented over several months, culminating in a formal public submission period between May and July 2012.

Wannon Water used a range of methods to engage customers and gauge their priorities and expectations. Their input has been pivotal in shaping Water Plan 3. Wannon Water remains acutely aware that affordability is at the forefront of our customer's minds. Flagging its intention to not raise water and sewerage tariff prices above CPI in the next regulatory period has significantly alleviated any customer concerns of cost pressures.

Wannon Water's proposed price path attracted the support of the Minister for Water, the Hon Peter Walsh in his speech to the Legislative Assembly on 6 June 2012:

"If you look at some of the water plans that have been put out for consultation, and let us take Wannon Water for one, in the first year there is a small price decrease for Wannon Water and then a zero price increase for the remaining four years. If you compare that to water plan 2 under the previous government, there was a 50 per cent increase in Wannon Water's fees over that time."

Wannon Water has a small decrease and then a zero increase in water plan 3 compared to a 50 per cent increase under the previous government. I congratulate John Vogels, the chairman of Wannon Water, for doing an excellent job on that."

MINISTER FOR WATER (EXTRACT FROM HANSARD)

Proposing not to increase water and sewerage prices enabled Wannon Water to also focus on consulting on other aspects of Water Plan 3 including service standards and key capital projects. The opportunity was also used to engage with customers on the needs of their community and changing water use habits.

Staple consultation methods of advertisement, customer committees and media awareness were supplemented with a strong 'grassroots' proactive campaign, meeting community groups, attending local events, utilising existing communications, distributing localised community newsletters and expanding online communication with an electronic water plan survey.

These tools and the subsequent outcomes are expanded below but suffice to say that the holistic and targeted approach proved successful in engaging a larger and more diverse customer base than in the development of previous water plans.

The consultation program has improved community awareness, delivered meaningful Water Plan 3 feedback and left Wannon Water with a more informed customer base.

5.2.1 THE CONSULTATION PROGRAM AIMS

Due to the vast and diverse customer base it was critical for Wannon Water to ensure that all of its customers had an opportunity to partake in the consultation. With inclusivity in mind consultation on Water Plan 3 Wannon Water aimed to:

- Gain a greater understanding of the current and future needs and expectations of its customers
- Enhance its decision making process by presenting and discussing options with customers, local community groups and other stakeholders
- Be transparent and accountable in preparing the Water Plan

- Better understand social, environmental, economic and sustainability issues and challenges facing south west Victoria
- Give all stakeholders the opportunity to be involved in policy, planning, service development and review, and have a sense of ownership of the outcomes
- Increase awareness of its services and assets
- Value-add to its existing stakeholder relationships

5.2.2 MEANINGFUL AND RELEVANT CONSULTATION

Customers are more inclined to become involved in the consultation process if information is meaningful, relevant and not convoluted. The focus of customer consultation was on tariff structures, affordability, service standards and capital works because this is what our customers view as most relevant and important to them.

Customers also differ in their news preferences. Wannon Water's 2012 Customer Satisfaction Survey reveals that 88% of our customers are satisfied with the way Wannon Water keeps them informed about relevant issues. Therefore throughout the consultation period it remained important to utilise existing communications channels, supplementing them with new initiatives.

Wannon Water's research (2012) finds that 75% of customers prefer to receive information with their bill. The balance of customers preferred email or newspapers. Taking this on board Wannon Water used a dedicated section on its billing notices to raise awareness about Water Plan 3 and drive customers to its website where a raft of information was available.

Wannon Water's gamut of Water Plan 3 consultation actions included:

- Media releases
- Online Water Plan Community Survey
- Radio advertising
- Press advertising
- Water Plan section on www.wannonwater.com.au
- Meeting and presenting to established community groups
- Meeting major customers
- Meeting major trade waste customers
- Input from Wannon Water customer committees
- Taking input from Wannon Water employees
- Conducting the 2012 Customer Satisfaction Survey
- Specific consultation on projects/strategies and local issues
- Distributing Water Plan information in 40,000 community newsletters
- Seeking feedback from local governments and CMAs
- Promoting consultation on billing notices
- Distributing Discussion Papers and fact sheets at community events
- Distributing fact sheets and Discussion Papers with sponsorship packs
- Water Plan displays in customer service centres
- Direct mailing customers who had previously raised pricing issues

5.2.2.1 ENGAGING WITH OUR CUSTOMERS IN NEW WAYS

In expanding and targeting its Water Plan customer engagement Wannon Water adapted to changing customer needs and expectations by engaging more broadly and creatively than it had on previous Water Plan's. Wannon Water encouraged greater participation and input into the Water Plan 3 through:

- **Targeted consultation.** Many customers are time poor, juggling employment, families and other commitments. Historically Wannon Water hosted forums and information sessions attracted very few attendees, resulting in minimal feedback. To consult on Water Plan 3 Wannon Water tapped into an existing network by presenting and facilitating 'forum' discussions at scheduled community group meetings including regional service organisations, Rotary Clubs, CWA's, residents associations, environmental groups and clubs. This format proved extremely successful as detailed below
- **'Customer friendly' documents.** For the first time Wannon Water presented to the public 'easy to read' Water Plan Discussion Papers designed for customers rather than regulatory compliance. Simplified fact sheets supported the Discussion Papers and highlighted key aspects of the Water Plan which were meaningful to customers. These were distributed with correspondence and available on our website. Advertisements and flyers moved away from standardised public notices where possible opting for a colourful more eye-catching visual strongly promoting incentive to get involved
- **Online engagement.** Wannon Water engaged and encouraged customers to a growing online forum by offering an incentive for customers to complete a quick web based survey about key aspects of the Water Plan including bill presentation, tiered pricing and green energy options. Almost 300 respondents completed the survey with the outcomes detailed below
- **Using existing resources.** Water Plan updates and key consultation dates were included on bills and in radio advertisements and directed customers to the website. Wannon Water facilitated a dialogue with stakeholders including industry groups, major customers, government agencies and local governments
- **Using our knowledge base.** Throughout 2011 and 2012 Wannon Water consulted extensively with its Customer Engagement Committee and project monitoring committees. These customer representatives have built up valuable knowledge and expertise as committee members, regularly providing constructive feedback and acting as conduits between Wannon Water and its customers
- **Maximising the media.** Wannon Water extended its media footprint throughout the Water Plan process in accordance with its approved Advertising and Communications Plan. In addition to continuing its relationship with major regional media outlets, Wannon Water increased the prominence of its consultation program in rural centres through greater use of local community newsletters and bulletins. Furthermore, through radio advertising on FM stations, the traditionally 'disengaged' 18-30 year olds have been made aware of Water Plan consultation. While the opportunity to provide input may not have been taken up by this audience, there is a general awareness of the process

5.2.3 WATER PLAN 3 DISCUSSION PAPERS

Wannon Water released Residential and Small Business/ Non-Residential Water Plan 3 Discussion Papers on 31 May 2012. Together with an 'About Water Plan Fact Sheet' they were uploaded to Wannon Water's website to accompany the existing Water Plan Customer Survey.

A media release was issued to all regional newspapers and electronic media with copies of the Discussion Papers and overview of the 'highlights' and consultation process.

Wannon Water's website was the predominant vehicle for information. The consultation strategy aimed to drive 'traffic' to the Water Plan section of the www.wannonwater.com.au. During the public consultation period:

- The Water Plan 3 specific web page was accessed 522 times
- 223 website homepage visitors clicked the link through to the Water Plan 3 page
- Residential Discussion Paper downloaded 117 times
- Business Discussion Paper downloaded 77 times

5.2.3 MEDIA COVERAGE

There was extensive coverage on the release of the Water Plan 3 Discussion Papers, largely in June 2012. Wannon Water's proposal to restrict price increases over the next regulatory period received favourable coverage:

"I am sure that current residents, small businesses and rural customers of Wannon Water will welcome the proposal to limit water price increases to CPI only. I welcome the positive leadership being proposed by Wannon Water in this new five year draft plan."

(The Hon. Dr Denis Naphine, Member for South West Coast, the Warrnambool Standard 9 June 2012, the Hamilton Spectator 9 June 2012)

Press coverage was widespread (Warrnambool, Camperdown, Mortlake, Hamilton, Portland, Terang and Cobden). The stories strongly encouraged the public to make submissions. Wannon Water's Managing Director was also interviewed on ABC regional radio, Warrnambool based 3YB and Hamilton based 3HA. The media coverage generated interest in the plan with a spike in the number of Discussion Papers being downloaded in early June 2012.

5.2.5 CUSTOMER ENGAGEMENT COMMITTEE

Wannon Water's Customer Engagement Committee ("CEC") has been a cornerstone of the consultation process, reviewing key proposals at quarterly meetings since early 2011. Members have built a sound understanding of the water industry and have 'grassroots' local knowledge as customers, a combination that Wannon Water values immensely.

Acknowledging that historically it has been difficult to facilitate a dialogue with customers about past Water Plans, as early as February 2011 the CEC workshopped how Wannon Water could engage customers more effectively on Water Plan 3. Workshop outcomes were adopted in the consultation strategy, including:

- Targeting existing community groups
- Writing the draft Water Plan in a way that drew readers attention to the key issues where feedback was sought
- Use of electronic surveys for general feedback

Throughout 2011 and 2012 the CEC considered the following matters in detail:

- Minor Trade Waste Tariff Structure
- 'Layout' of the Discussion Papers
- Customer Assistance Measures (Hardship)
- Adjustment of Service Standards
- Customer Tariff Choice
- Tariff Structure
- Water Supply Demand Strategy 2012-2060

The input of the CEC on these topics gave the Wannon Water Board of Directors a valuable insight and shaped 'what' and 'how' information was presented to the general public. Feedback included:

- Maintaining Water Plan 2 service standards, or adjusting only slightly to reflect the high satisfaction with services
- Supporting merging those tariff groups whose prices were already similar; however to maintain pricing that is reflective of the cost of operating each the water and sewerage systems
- Favouring the retention of a tiered water pricing structure
- Maintaining the status quo in terms of cross-subsidisation
- Considering a long term plan to merge all sewerage tariff groups
- Ongoing promotion of water efficiency measures despite being free of water restrictions
- Supporting further investigation and development of 'fit for purpose' water sources.

5.2.6 KEY STAKEHOLDER CONSULTATION

Wannon Water identified key customers, regulators and peak groups who had a 'stake' in Water Plan 3 including:

- Environmental Protection Agency
- Department of Health
- Department of Sustainability and Environment
- Major Trade Waste Customers
- Minor Trade Waste Customers
- Major Customers
- Southern Grampians Shire Council
- Glenelg Shire Council
- Warrnambool City Council
- Corangamite Shire Council
- Moyne Shire Council
- Corangamite Catchment Management Authority
- Glenelg Catchment Management Authority

In many cases initial direct mail was followed up with face to face briefings for more in depth and detailed discussions.

5.2.6.1 MAJOR CUSTOMERS

Targeted presentations to some major customers and major trade waste customers proved effective in communicating Wannon Water's proposed price paths. Using historical data Wannon Water presented estimated annual charges for water, sewerage and trade waste charges over the next regulatory period.

As Wannon Water was proposing no real increase in water and sewerage tariffs the proposed tariff pricing was supported. Furthermore, Wannon Water maintains ongoing dialogue with its major customers outside of the drafting period.

5.2.6.2 MAJOR TRADE WASTE CUSTOMERS

Major Trade Waste customers indicated that they were satisfied with the proposed price path for trade waste charges (2% increase), considering it to be well within their business

forecasts. One major customer did not support the move to introduce a major trade waste customer service charge rather than continue with a 100% volumetric charge.

5.2.6.3 LOCAL GOVERNMENTS

The five local government authorities within Wannon Water's service area have diverse constituencies, community needs and interests. Wannon Water provided each Council with Discussion Papers and the opportunity for briefings. The following feedback was received:

- Warrnambool Council was keen to explore Wannon Water's local capital works program over the next regulatory period. Wannon Water will work with council on the location of a new water tower at Hopkins Point
- Local government authorities favour supporting small businesses; therefore Councils supported reducing the costs of trade waste services to small businesses not required to install pre-treatment facilities
- Corangamite Council praised Wannon Water for its "well-structured, succinct and plain language" Discussion Paper. Council supported both Wannon Water's commitment to affordability and for reducing fire service charges
- Corangamite Council posed that Wannon Water revert to a flat rate for water applicable to all residential and non-residential customers to encourage greater water efficiencies. While Wannon Water considers Council's feedback valuable, it is contrary to the feedback Wannon Water received from many other customers who favour the tiered system as a more effective way to encourage water use efficiency
- Corangamite Council also suggested that sewerage schemes for Lismore and Derrinallum be considered to address "health and safety risks posed by ongoing reliance on septic tank and absorption trenches for wastewater storage and disposal". Wannon Water is willing to assist Council explore more thoroughly landowners' willingness to pay for sewerage schemes and assess alternative treatment options

5.2.6.4 CATCHMENT MANAGEMENT AUTHORITIES

Wannon Water received a written submission from Corangamite Catchment Management Authority (CCMA) focusing on environmental outcomes. The CCMA sought specific reference to river health strategies and Western Region Sustainable Water Strategy (SWS) in the Water Plan. Throughout the next regulatory period Wannon Water will continue to work collaboratively with the CCMA to implement actions from these strategies, particular Action 7.3 (SWS) to

address summer low flows in the Gellibrand River catchment. Refer to section 15.7 for Wannon Water's response.

While specific submissions were not received from all local governments and CMA's Wannon Water continues to work hand in hand with these authorities on local capital projects, forward planning and service delivery.

5.2.7 CUSTOMER SATISFACTION SURVEY

Wannon Water annually surveys residential and business customers to measure its performance in service delivery against targets and to assess customer satisfaction with its services. Wannon Water has consistently achieved extremely high levels of customer satisfaction. These results continued in 2012, supporting only minor adjustments to service standards.

Residential Customers

Wannon Water again achieved an outstanding result with 93% of customers either satisfied or extremely satisfied with the quality of water and sewerage services.

Strengths and weaknesses remain consistent with previous surveys with customers believing that Wannon Water performs well in customer service, sewerage service delivery, water pressure and clarity. No significant weaknesses were identified.

Overall improvements in domestic customer satisfaction levels since 2011 were:

- Satisfaction with the smell of water
- Fewer water interruptions
- Management of the sewerage system

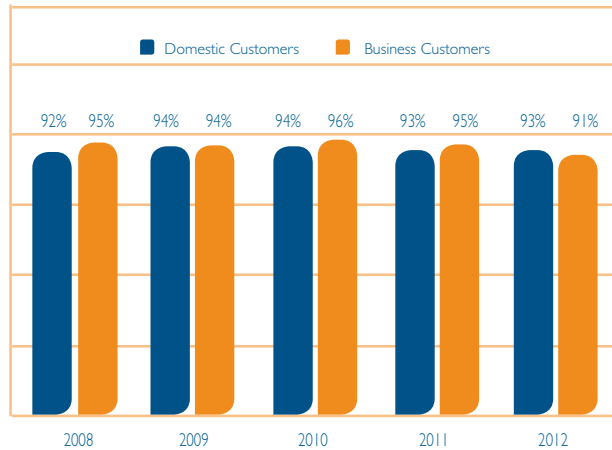
Customers were asked to make a comment about Wannon Water during the survey. 38% of respondent's comments related to billing and pricing. Wannon Water's proposal to not lift residential and business water and sewerage prices above CPI during the next regulatory period is consistent with the feedback received from our customer base.

Business Customers

A favourable 91% rating was also achieved with business customers.

Business customers reported improved satisfaction with customer relations and ease of access to services however Wannon Water recognises that the taste and smell of water in the western district rated lower than usual. Projects in 2012-13 and throughout the next regulatory period in Casterton, Heywood and Hamilton will among other things help address these issues.

Customer Satisfaction – Water Plan 2



5.2.8 COMMUNITY EVENTS AND SPONSORSHIP

Throughout the public consultation period Wannon Water made a habit of making Water Plan 3 Discussion Paper's and survey flyers available at public events. This proved effective in raising awareness about Water Plan and likely lifted the survey response rate. Discussion Paper s and/or water plan survey flyers were distributed at:

- Hamilton Sustainable Living Expo
- Western District Heath Services Get Active
- Glenelg2Grampians launch
- Emmanuel College Sustainability Festival
- NAIDOC week events
- Penshurst Groundwater Forum
- Warrnambool Heritage Festival
- Sensitive Urban Design Seminar (Warrnambool)

In January 2012 Wannon Water sponsored the Warrnambool Sustainable Living Expo which attracted a range of stalls promoting 'clean and green' living and more than 2000

attendees. Preceding the Water Plan survey, the opportunity was ideal to survey customers about their water use, awareness of water sustainability, and views on future investment, willingness to pay and water sources. 111 surveys were completed with the following results:

- Willingness to explore non-traditional water supply options. The majority of support was for recycled water (33%) and storm water (32%). There was less support for increasing the number and range of water saving initiatives (17%)
- Support for increasing volumetric charges, and reducing service charges. 79% of respondents said their ideal bill would be mostly water usage charge with a smaller fixed charge
- Customers prefer to measure water consumption against their own historic use (73%), rather than their neighbours or town average

5.2.9 PRESENTATIONS TO LOCAL COMMUNITY ORGANISATIONS

Wannon Water 'tapped' into an existing audience (community network) by presenting at scheduled meetings for service organisations, Rotary, Country Women's Associations, residents associations and garden clubs among others. This resulted in reaching more than 400 customers and facilitating high quality and informed 'forum' discussions.

'Tapping' this network proved successful not only in reaching a significantly wider audience, but also in reaching diverse demographic groups. For example some group's membership base was largely high income earners or self-funded retirees while others were made up of pensioners and young families. To this end Wannon Water is confident that the outcomes of its consultation are representative of its customers; with no one group dominating the outcome. Furthermore with attendance at meetings in Portland, Warrnambool, Camperdown, Hamilton and Penshurst, Wannon Water has ensured that the views of our wide and geographically diverse customer base have shaped this plan. Furthermore, to accommodate meeting schedules briefings for groups in Cobden, Heywood and Casterton have been scheduled over the coming months.

Presentations were targeted to the local area with an overview of services and supplies to that area, capital projects, pricing for the relevant group and service standards. While each audience

expressed great interest in capital expenditure in their area and details of projects planned there was little deviation in the input with regards to tariff structure, service standards and hardship provisions. Observations from the presentations are as follows:

- Customers welcomed Wannon Water's intention to hold water and sewerage charges at current levels in real terms
- General interest in unaccounted for water and the notion that water can be 'lost', subsequently leading to discussion of Wannon Water's plans to reduce unaccounted for water
- Lack of interest in adjusting service standard targets as Wannon Water is seen to already perform well
- While customers favour a greater component of their water charges being variable, there is a growing awareness that Wannon Water is a fixed cost business. Some commented that any effort to rebalance the variable charges to greater than 60% would be detrimental to larger families
- Content to leave tiered volumetric charges in place. Customers have become familiar with this tariff structure and feel that the three tiers are a way of promoting water efficiency
- Supported reducing pricing complexity by merger of tariff groups with similar prices

5.2.10 FOCUS GROUPS

Wannon Water collaborates with the Intelligent Water Network (IWN) as detailed in Section 6. As part of the IWNs Customer Needs and Values research project a focus group was held in Hamilton in July 2011 to evaluate the values and needs of customers in regards to water services and the future design of service delivery among other things.

Overall the study found that customers want more control of their water use and that customers want to be recognised for 'doing the right thing'.

Hamilton customers participating in the focus group discussed their expectations of Wannon Water, what influences their household water use and visioning their ideal water service. The focus group customers preferred a pricing system that enabled them to pay for their water use rather than the service. The focus group also sought greater communication from Wannon Water about its services and water management. In recent months Wannon Water has addressed this through more frequent community visits to the Hamilton district and localised newsletters.

5.2.11 SPECIFIC ISSUES CONSULTATION AND PROJECT COMMITTEES

Throughout the development of Water Plan 3 Wannon Water engaged with existing project monitoring committees and consulted on specific projects as required. Relevant information pertinent to this plan was considered.

Wannon Water's revised Water Restrictions By-Law and new Permanent Water Saving Plan attracted limited public interest, demonstrating that the lessons of the drought have resonated with our customers and water efficiency is now 'standard practice'.

The West Portland Sewerage Scheme Project Monitoring Committee continued to act as a conduit between Wannon Water and West Portland residents as construction of the scheme commenced. Water Plan 3 Discussion Papers and fact sheets were provided to members in June 2012 and their input was encouraged.

The Dutton Way Sewerage Scheme Project Monitoring Committee was also given the opportunity to provide feedback on Water Plan 3. While no submissions were received from members, the committee continues to inform and assist Wannon Water in raising awareness of key milestones and managing community feedback on the project.

Wannon Water consulted broadly on the 2012-2060 Water Supply Demand Strategy (WSDS). Widespread media coverage drawing on localised aspects of the WSDS,

in conjunction with prominent advertising, saw the WSDS become the most frequently downloaded file on our website in early 2012. Wannon Water received articulate and thorough submissions on its WSDS.

During 2011 a project to develop a Master Plan to guide the future management for the Konongwootong Reservoir and adjoining land commenced. A well-publicised and successful consultation process with the local community, traditional landowners and relevant stakeholders has resulted in a holistic and thorough forward plan which will be implemented throughout the next regulatory period, subject to securing external funding.

Wannon Water also consulted with Cavendish customers regarding the non-compliance of their drinking water with Department of Health aesthetic parameters due to naturally occurring soluble aluminium. A ballot in March 2012 found that 92% of respondents favoured Wannon Water seeking an exemption from the Department of Health rather than pursuing a water treatment plant. Affordability was a predominant reason for the rejection of a treatment plant, supporting Wannon Water's aim throughout the next regulatory period to keep prices affordable.

5.2.12 ONLINE WATER PLAN 3 SURVEY

In May 2012 Wannon Water launched its online Water Plan 3 Survey. Advertising commenced in press and on regional radio, 3YB and 3HA. Customers were directed to our website on their bills to complete the survey and go in the running for a new water efficient washing machine. Wannon Water's community newsletter was also distributed to all customers urging people to 'have their say' on Water Plan 3 and promoting the community survey.

The questions aligned with those posed in the Water Plan 3 Discussion Papers but framed in a way that gave customers a multiple choice answer. The Water Plan Survey was well received and an effective way to involve time-poor customers in the consultation processes. The results are as follows:

- 286 customers took the survey
- 84% were homeowners

- 36% of respondents from Warrnambool (respondents from all areas)
- 57% said that the quality of services was more important to them than affordability or reliability
- 90% were satisfied with Wannon Water services (consistent with Customer Satisfaction Survey)
- 81% are happy with guaranteed service levels and existing service standards
- While 80% encouraged Wannon Water to explore the use of 'green power' only 58% support paying "a little" more on their bill for Wannon Water to invest in green power
- 55% support a billing structure where those who use the least water pay the lowest rate per kL
- 82% of customers said that their ideal water bill reflects the amount of water they actually use



5.2.13 WRITTEN SUBMISSIONS

Wannon Water received 14 written submissions following the release of its Water Plan 3 Discussion Papers. Some customers completed the questions at the end of each section in the Discussion Paper, while others submitted letters and emails with general comments on specific aspects.

Submissions were made by residential and non-residential customers in Warrnambool, Camperdown, Hamilton, Casterton and Allansford. With the exception of Portland this represents the regions larger population centres.

Comments indicated that customers ultimately favoured retaining the current tiered water volume structure, although they also sought to give greater weight to the volumetric

component of their water account. Submissions also made no objection to merging some tariff groups if it was towards a longer term aim to simplify the tariff structure. A full summary of the customer feedback is provided below.

Wannon Water did not receive any submissions from rural customers. Wannon Water concludes that these customers are content to maintain the status quo, considering rural pricing is not planned to increase above CPI throughout the course of the next regulatory period.

Written submissions were also received from agencies, local governments and catchment management authorities as detailed above.

5.3 OVERVIEW OF CUSTOMER FEEDBACK ON WATER PLAN 3 DISCUSSION PAPERS

Following is a summary of customer preferences:

5.3.1 WATER SERVICE FEES

- Positive feedback on NIL increase (CPI adjustment only) for Water Plan 3
- Support for merging some of tariff groups to simplify tariff structure
- Support to apply any business efficiency reduction to groups currently paying the highest charges
- Support to reduce fixed water service charge as much as possible as an incentive for customers to reduce their water use and control their bill
- One submission sought a substantial discount in service charges for community and volunteer group facilities

5.3.2 WATER VOLUME FEES

- While some submissions supported reverting to a flat per kL rate for water for simplicity and administration, generally customers supported retaining the current three tier structure because it encourages water efficiency
- Low water users are not willing nor able to pay the higher per kL price that would result from the introduction of a flat rate
- Concern that any change to the current inclining block structure would detrimentally affect those customers who struggle most to make ends meet i.e. pensioners, tenants, single parent families
- Customers want as much emphasis on the volume component of their bill as possible – ‘user pays’. However there is a growing awareness about the fixed cost nature of service delivery

5.3.3 SEWERAGE TARIFFS

- Positive feedback on NIL increase (CPI only) throughout Water Plan 3 and 1% reduction in year one for groups currently paying the highest charges
- Consultation has highlighted a lack of awareness about sewerage services and the fixed costs involved
- Support for merging some groups to simplify current charges. One submission showed strong support for merging all of the sewerage tariffs as it would “send a message to customers that an effort is being made to standardise service delivery”.
- Isolated suggestions of volumetrically charging for sewerage
- A pie chart showing makeup of a bill would demonstrate the dominance of sewerage charges but at significant risk of discouraging water conservation measures

5.3.4 SERVICE STANDARDS

- Overwhelmingly the community does not see any need to adjust service standards from current levels. They are therefore supportive of the Discussion Paper proposal to adjust by small increments based on the variability of the five year average
- More than 90% of customers are happy with our current levels of service and those dissatisfied note affordability as their reason rather than the delivery of our services
- In fact where substantial cost savings can be made without detriment some customers will tolerate a lesser target

5.3.5 FIRE SERVICES

- There has been support from business owners and councils for the consolidation of fire services to a single group based on size of connection and the reduction in fire service charges. An isolated submission suggested that Wannon Water could should base fire service charges on the size of the connection *and* the size of the dwelling (excluding vacant land)
- Another submission proposed reducing fire service charges to two groups only (up to and including 80mm diameter and 100mm diameter and above). While Wannon Water considered this option, it would place a cost burden on customers requiring only small diameter services to meet the revenue shortfall

5.3.6 GUARANTEED SERVICE LEVELS

- Customers expressed satisfaction with Wannon Water's guaranteed service levels and new Hardship GSL (detailed in Section 5.7). This outcome is evidenced in the Water Plan Survey results with 81% satisfied with the proposed GSL levels for the next regulatory period

Wannon Water is conscious that some customers experience genuine financial hardship at one time or another. The corporation has customer assistance measures in place to assist these customers. There were a number of comments regarding the provision of hardship assistance. There are mixed feelings in the community about supporting hardship customers and whose responsibility it is. Some customers believe that it is a cost burden on those customers who

promptly pay their bills that they shouldn't bare. In contrast other customers view it as a social responsibility to help those in need. There was consensus on needing a full through and consistent approach to assessing what constitutes hardship.

Wannon Water's Customer Engagement Committee considered customer hardship assistance measures in detail and supported retaining a bonus credit and debt waiver scheme but recommended it should be only be implemented on a case by case basis. The Committee also supported an incentive program for customers who sign up to have regular payments deducted through Centrepay. This initiative was also supported by the public.

5.3.7 MINOR TRADE WASTE CHARGES

Wannon Water wrote to more than 1000 Minor Trade Waste Customers detailing the new Trade Waste Customer Charter which came into effect on 1 July 2012. Wannon Water also took the opportunity to encourage minor trade waste customers to participate in the consultation on Water Plan 3. While there was little substantive feedback from customers specifically relating to trade waste, that which was received favoured the proposed price restructure:

- Support for changes to halve the Minor Trade Waste Charge for businesses not required to have pre-treatment facilities. The community feels that charges should reflect the cost of delivering the service to each individual business

- In the current market small businesses face uncertainty so halving the minor trade waste charge for some businesses and only applying a 2% per year real price increase was largely viewed positively
- There were no submissions that opposed reducing the volume threshold for levying the sewerage volume charge from 750kL to 520kL per year. Warrnambool City Council was supportive of the proposal

5.3.8 CONSULTATION CONCLUSIONS

While all stakeholders welcomed news of no real price increases in water and sewerage prices there is a general apathy towards more specific aspects of Water Plan 3. Obviously affordability is the fundamental concern as the priority of most customers was to ensure their bills stay as low as possible.

While there was great interest in proposed capital works projects there was little input on projects outside those included in this Plan. In fact, some suggested that they would be willing to defer non-urgent capital works if it would reduce pricing.

Overwhelmingly our customers are satisfied with Wannon Water's services and see no need to substantially increase targets. In fact the clear message is that customers will not tolerate raising service standards to such an extent that it would impact on price.

Customers trust Wannon Water to plan for the future while maintaining the integrity of its assets to adequately meet customer needs. As Wannon Water is in a position to not impose real water and sewerage price increases in Water Plan 3 customers were satisfied that Wannon Water has struck the correct balance between the cost and quality service delivery.

5.4 REGULATORY AND GOVERNMENT OBLIGATIONS

Wannon Water consulted with the Department of Health, the Environment Protection Authority, and the Department of Sustainability and Environment, regarding regulatory

requirements. This Water Plan is consistent with mutually agreed positions.

5.4.1 DEPARTMENT SUSTAINABILITY AND ENVIRONMENT

5.4.1.1 STATEMENT OF OBLIGATIONS

The Statement of Obligations provides general guidance and specific direction to Wannon Water directly from the Minister and covers matters including:

- Guiding Principles – Such as sustainable management, continuous improvement, innovation, stakeholder engagement, minimisation of detrimental impacts, financial viability, minimise whole of life costs of assets, and provide services in an affordable manner
- Governance – The role of the Board and Board performance requirements
- Customer and Community Engagement – Open and transparent customer engagement, provision of information to customers and schools
- Risk Management – Manage risks having regard to ISO31000:2009, manage incidents and emergencies, manage dam safety having regard to ANCOLD Guidelines and notify any Blue-Green Algae (BGA) events and act as Regional Coordinator for BGA events

- Planning – Prepare a Water Supply Demand Strategy (to be amended to be a Regional Integrated Water Cycle Strategy) and drought response plans
- Water Services – Manage assets and bulk water systems, investigate sewerage services for un-sewered areas, develop policies and practices to manage trade waste and schemes

Wannon Water has embedded the above requirements into its systems of management (policies and procedures) and Statement of Corporate Intent. The area of significant ongoing expenditure is in relation to dam safety where Wannon Water is required to develop and implement processes to identify, assess, manage, prioritise improvements to and periodically review the safety of its dams in accordance with the ANCOLD Guidelines.

Key projects to meet these obligations are shown in Table 5-1 Key Dam Safety Projects

Project	Year	Expenditure
Plantation Road storage embankment stabilisation	2013-15	\$477,642
Coleraine WRP lagoons embankment remedial works	2017-18	\$190,549
Glenthompson Reservoir embankment / spillway upgrade	2015-16	\$101,626
Hartwicks Reservoir outlet valves replacement & tower reconfiguration	2015-16	\$142,276
Cruckoor Reservoir outlet works refurbishment & reconfiguration	2015-16	\$116,870
Total		\$1,028,964

Table 5-1 Key Dam Safety Projects

5.4.1.2 ENVIRONMENTAL CONTRIBUTION

The Environmental Contribution to be paid to the State Government for the 2013-14, 2014-15 and 2015-16 years increases to \$2.56M per year. This represents an annual increase of \$0.99M on the contribution paid by Wannon Water during the Water Plan 2 regulatory period.

Wannon Water will absorb this increase in the Environmental Contribution through productivity savings.

5.4.1.3 DRAFT WATER (WATER SUPPLY AND SEWERAGE) REGULATIONS 2012

The Department of Sustainability and Environment has notified Wannon Water that the Draft *Water (Water Supply and Sewerage) Regulations 2012* ("the Regulations") are likely to come into effect on 1 January 2013.

The Regulations will significantly increase Wannon Water's obligations in regard to the replacement of property service pipes and the maintenance and replacement of sections of sanitary drains that were previously the responsibility of property owners.

Prior to the Regulations taking effect, under the Customer Code issued by the Commission, Wannon Water is only responsible for the maintenance of 20mm and 25mm property service pipes and the replacement cost of 20mm and 25mm galvanised property service pipes beyond the first \$550. Property owners are currently responsible for the replacement of property service pipes from the connection point on the water main to the meter assembly (only the first \$550 for galvanised pipes).

Under the Regulations, Wannon Water will be responsible for the maintenance and replacement of all water service pipes from the connection point to the meter assembly.

The Regulations will also make Wannon Water responsible for the maintenance and replacement of sections of the sanitary drains from the sewer connection point up to but not including the inspection shaft or where the sewer is located in an adjoining property - from the connection point to 1 metre inside the customer's property boundary. These sections of the sanitary drains are most vulnerable to tree root invasion, blockage and cracking. Prior to the Regulations Wannon Water was not responsible for the maintenance or replacement of any sections of sanitary drains.

The total estimated cost of compliance with the Regulation is \$0.41M per year.

5.4.2 DEPARTMENT OF HEALTH

The Department of Health regulates water quality via the *Safe Drinking Water Act 2003* and *Safe Drinking Water Regulations 2005*.

5.4.2.1 SAFE DRINKING WATER REGULATIONS

The *Safe Drinking Water Regulations 2005* create legal requirements to meet the health based parameter limits of the Australian Drinking Water Guidelines (ADWG) and ensure that drinking water does not contain any toxin, pathogen, substance or chemical, in such amounts that may pose a risk to human health.

All regulatory audits of Wannon Water conducted by independent auditors on behalf of the Department of Health have concluded that Wannon Water complies with the *Safe Drinking Water Act 2003* and *Safe Drinking Water Regulations 2005*. Furthermore, Wannon Water completed the regulatory undertakings that have existed from time to time.

5.4.2.2 DEPARTMENT OF HEALTH GUIDANCE NOTE 14

The Department of Health issued Guidance Note No. 14 to water corporations on its regulatory requirements for Water Plan 3. The Department of Health also issued a "*Consolidated list of questions and responses from ADWG Seminars*" which clarifies the application of the *Australian Drinking Water Guidelines (ADWG)* where they are referenced within the *Safe Drinking Water Regulations 2005*.

Wannon Water provided the Department of Health with an overview of its proposed expenditure commitments which address the issues set out in Guidance Note No. 14.

Appendix E outlines Wannon Water's planned expenditure to address the Guideline issued by the Department of Health and the Department's acceptance of the planned works. The Department has also requested "*discussions...on research projects that could potentially be jointly undertaken in order to quantify any potential water-related health issues that may arise as a result of elevated levels of TDS in water supplies*".

Following subsequent discussions with the Department, no additional expenditure commitment is required by Wannon Water to participate in the research projects.



5.4.2.3 TOTAL DISSOLVED SOLIDS

For drinking water supplies containing Total Dissolved Solids (TDS) the Department of Health requires that “Where TDS of the drinking water is above 1,200 mg/L, remedial action should be taken during the regulatory period. ...Ideally, the TDS of supplied water should be below a TDS of 600 mg/L”.

Wannon Water has water supply systems sourced from groundwater where TDS is above 600 mg/L located at:

- Macarthur (980 mg/L),
- Port Fairy (833 mg/L),
- Portland (681 mg/L),
- Heywood (647 mg/L), and
- Penshurst (640 mg/L).

TDS removal requires reverse osmosis treatment which entails high capital and operating costs. Wannon Water has previously undertaken customer willingness-to-pay surveys at Macarthur and Port Fairy and both communities overwhelmingly demonstrated very low willingness-to-pay for a reduction in TDS.

5.4.2.4 NEW TURBIDITY LIMITS

The *Safe Drinking Water Regulations 2005* sunset in 2015, midway through the Water Plan 3 regulatory period. The Department of Health has formally notified Wannon Water of its intention to incorporate the health based parameters contained in the most recent version of the *ADWG* into the *Safe Drinking Water Regulations 2005* from 2015.

These proposed changes will result in new turbidity limits for filters that treat surface water sources. Consequently Wannon Water has assessed filter performance at the relevant water treatment plants and has included \$3.3M of capital projects involving filter upgrades and ultra violet disinfection to ensure compliance with the revised regulations in 2015.



5.4.3 ENVIRONMENT PROTECTION AUTHORITY

The Environment Protection Authority (EPA) regulates Wannon Water's environmental obligations via the *Environment Protection Act 1970*, various state environment protection policies, regulations and guidelines. The Wannon Water EPA Corporate Licence governs the discharges from its water reclamation plants to the environment.

The EPA provided guidance to Wannon Water for Water Plan 3 and the EPA's expectations are summarised in Table 5-2 EPA Guidance Summary.

Theme	Water Plan 3	Water Plan 4
General	<ul style="list-style-type: none"> Compliance with legislation and regulations Implement the waste hierarchy for all relevant business activities Ensure efficient use of resources in business activities 	
Sewerage treatment and disposal	<ul style="list-style-type: none"> Continue monitoring, reporting and reducing discharge impacts and mixing zones Continue upgrade program for treatment plants 	<ul style="list-style-type: none"> Little to no significant environmental impact, or net environmental benefit provided All plants meet minimum standards
Sludge and Biosolids Management	<ul style="list-style-type: none"> Implement plans to reuse 100% of biosolids and reduce existing stockpiles over time 	<ul style="list-style-type: none"> Existing stockpiles reused. Biosolids and their beneficial properties (e.g. nutrients, organics, and carbon) reused for higher value uses
Management of the Sewerage System	<ul style="list-style-type: none"> Implement a risk-based improvement program for the sewerage system Implement sewerage backlog programs, including provision of sewerage in un-sewered industrial areas 	<ul style="list-style-type: none"> Continuously improve and reduce the environmental impacts of the sewerage system Reduce impact in un-sewered areas by providing sewerage management solutions (centralised or decentralised)
Water Efficiency	<ul style="list-style-type: none"> Work with communities and businesses to implement efficient water-use practices Comply with EREP obligations 	
Catchment, waterway and groundwater management	<ul style="list-style-type: none"> Implement environmental flows audit recommendations Implement irrigation drainage audit recommendations Managed aquifer recharge (MAR) schemes assessed and managed in accordance with EPA guidelines 	<ul style="list-style-type: none"> Environmental flows provided in line with waterway management strategies Irrigation drainage activities have little or no impact on catchment, waterways and groundwater MAR schemes do not adversely impact groundwater and aquifers

Table 5-2 EPA Guidance Summary

Wannon Water's works program and expenditure to address EPA requirements is set out in **Appendix F**.

5.5 SERVICE STANDARDS

Wannon Water has revised its service standards for the Water Plan 3 regulatory period generally based on its actual average performance over the past 5 years plus (or minus) one standard deviation except for unaccounted for water, complaints to the Energy and Water Ombudsman Victoria (EWOV) and water flow rates:

- Unaccounted for water targets were set having regard to the proposed expenditure program on reducing non-revenue water
- Complaints to EWOV target was calculated based on four years actual performance due to a change in reporting categories in the prior period
- Minimum flow rates target remains unchanged

Figure 5-2 Normal Distribution Curve shows the effect of adding and subtracting standards deviations from the average.

The service standard targets for the Water Plan 3 regulatory period are shown in Table 5-3 Core Service Standards and Targets.

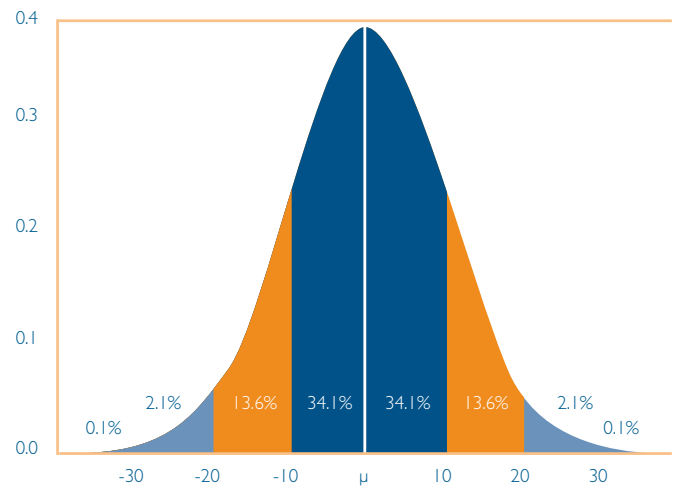


Figure 5-2 Normal Distribution Curve

Service Standards	Water Plan 2 Target	Water Plan 3 Target
WATER		
Unplanned water supply interruptions (per 100km)	10	9.2
Average time taken to attend bursts and leaks (priority 1) (minutes)	35	21
Average time taken to attend bursts and leaks (priority 2) (minutes)	60	40
Average time taken to attend bursts and leaks (priority 3) (minutes)	240	118
Unplanned water supply interruptions restored within 5 hours (%)	97	97
Planned water supply interruptions restored within 5 hours (%)	90	93
Average unplanned customer minutes off water supply (minutes)	9.9	6.3
Average planned customer minutes off water supply (minutes)	9.0	3.8
Average frequency of unplanned water supply interruptions (number)	0.09	0.07
Average frequency of planned water supply interruptions (number)	0.05	0.03
Average duration of unplanned water supply interruptions (minutes)	108	91
Average duration of planned water supply interruptions (minutes)	180	166
Number of customers experiencing more than 5 unplanned water supply interruptions in the year (number)	0	0
Unaccounted for water (%)	12.0	See Note 1
SEWERAGE		
Sewerage blockages (per 100km)	38.3	22
Average time to attend sewer spills and blockages (minutes)	30	62
Average time to rectify a sewer blockage (minutes)	90	127
Spills contained within 5 hours (%)	98	99
Customers receiving more than 3 sewer blockages in the year (number)	0	0
Customer Service		
Complaints to EWOV (per 1000)	0.60	1.2
Telephone calls answered in 30 seconds 1300 926 666 (%)	98.9	96

Table 5-3 Core Service Standards and Targets

Notes:

1. The target for Unaccounted for Water (%) is 15.4% in 2013-14 reducing to 14.9% (2014-15), 14.4% (2015-16), 13.9% (2016-17) and 13.4% (2017-18).

The minimum flow rates service standard is unchanged and is shown in Table 5-4 Minimum Flow Rates.

Minimum Flow Rates	Target				
	20mm	25mm	32mm	40mm	50mm
Diameter of the property service pipe	20mm	25mm	32mm	40mm	50mm
Minimum flow rates (litres per minute)	20	35	60	90	160

Table 5-4 Minimum Flow Rates

Furthermore, the Commission requested that Wannon Water consider setting service standards for: biosolids reuse, sewerage backlog connections, environmental discharge licence requirements and drinking water quality compliance with standards.

The proposed new service standards targets are shown in Table 5-5 Proposed New Service Standards and Targets.

New Service Standards	Target				
	2013-14	2014-15	2015-16	2016-17	2017-18
Compliance with <i>Safe Drinking Water Regulations</i> 2005	100%	100%	100%	100%	100%
Biosolids Reuse	100%	100%	100%	100%	100%
Number of analyses complying with EPA Corporate Licence as % samples	95%	98%	98%	98%	98%

Table 5-5 Proposed New Service Standards and Targets

5.6 GUARANTEED SERVICE LEVELS

Wannon Water will continue to offer its customers guaranteed service levels as shown in Table 5-6 Guaranteed Service Level Scheme.

GSL Event	Payment
More than 5 unplanned water supply interruptions to a property in 12-months	\$50
A sewer spill within a residential house not contained within 1 hour of notification.	\$500
Restricting water supply or taking legal action against a residential customer prior to taking reasonable endeavours to contact the customer and provide them with information	\$300

Table 5-6 Guaranteed Service Level Scheme

Further details regarding the Guaranteed Service Levels are set out in the Wannon Water Customer Charter.

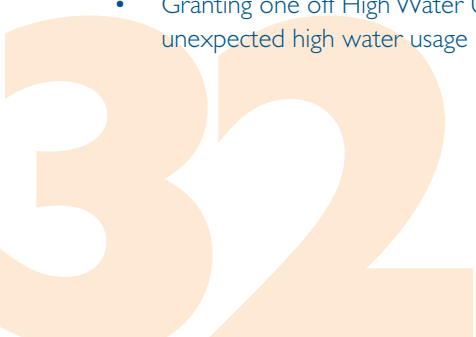
5.7 CUSTOMER FINANCIAL HARDSHIP PROGRAM

Wannon Water offers support and assistance to vulnerable residential customers experiencing undue financial hardship. This support and assistance includes:

- Providing information on how Wannon Water deals with residential customers experiencing financial hardship
- Granting "bonus credits" for 1 in every 3 instalment payments where a customer in financial hardship complies with an instalment payment
- Long term debt write-off in exceptional circumstances
- Granting one off High Water Usage allowance for unexpected high water usage

- Assistance to make application under the Utility Relief Grant Scheme
- Incentives for Centrelink customers who use Centrepay deduction for payments to Wannon Water
- Providing water efficiency audits and minor water appliance retrofits for customers in exceptional financial hardship with a history of high water usage

The projected annual cost of the customer financial hardship program is \$0.18M



6 REVENUE REQUIREMENT FOR WATER PLAN 3

6.1 OVERVIEW OF REVENUE REQUIREMENT

This section provides an overview of the revenue required by Wannon Water to meet its obligations and deliver services over the Water Plan 3 regulatory period. Assumptions about expenditure requirements, efficiency initiatives, capital expenditure and capital financing are included in this section.

To deliver the proposed service standards and other outcomes Wannon Water used the 'building block' approach to derive the forward estimates of the revenue required over the Water Plan 3 regulatory period. This approach is compliant with the Commission's framework.

Under this approach the revenue requirement reflects operating expenditure and a return on and of the regulatory asset base ("RAB"). The RAB is updated each year to reflect additional capital expenditure net of contributions, asset disposals and regulatory depreciation. Key components of the building block approach are detailed separately below.

Over the 5 years of the Water Plan 3 regulatory period Wannon Water requires a total revenue requirement of \$331M. The proposed revenue raised reduction in 2013-14 is 1% real (meaning before adjustment for inflation) and 0% real per year thereafter.

Figure 6-1 Composition of Revenue Requirement for Regulatory Period below illustrates the composition of Wannon Water's revenue requirement over the regulatory period. The major components are operating expenditure (66%) and return on the RAB to 30 June 2013 (22%).

Composition of revenue requirement for regulatory period

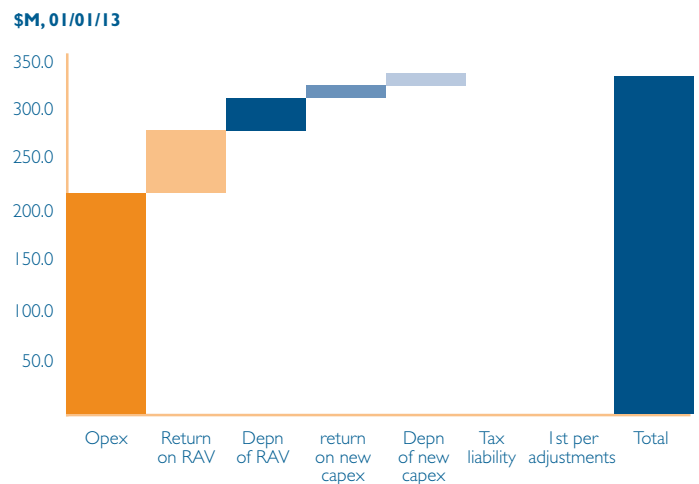


Figure 6-1 Composition of Revenue Requirement for Regulatory Period

It also highlights the composition and relative importance of the revenue requirement. Operating expenditure is relatively consistent between \$42.71M and \$44.5M per year, as is the return of assets at an average of \$8.37M per year. The return on assets increases over the period from \$13.04M to \$15.67M largely due to the return on new capital expenditure.

Total revenue requirement increases marginally from \$66.18M for 2013-14 to \$66.81M in 2017-18.

Revenue requirement	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Operating expenditure	44.50	43.41	42.95	42.98	42.71
Return on assets to 30/6/13	12.55	12.15	11.85	11.57	11.29
Regulatory depreciation of assets to 30/6/13	7.85	5.72	5.16	5.14	5.10
Return on new assets	0.50	1.57	2.60	3.53	4.39
Regulatory depreciation of new assets	0.79	2.12	3.17	3.48	3.32
Adjustments from last period	-	-	-	-	-
Tax liability	-	-	-	-	-
Total revenue requirement	66.18	64.97	65.74	66.70	66.81

Table 6-1 Water Plan 3 Revenue Requirement

Table 6-1 Water Plan 3 Revenue Requirement outlines Wannon Water's forecast Business As Usual operating expenditure for the 5 years of the Water Plan 3 regulatory period. It also shows actual and forecast operating expenditure for 2011-12 and 2012-13 respectively.

Wannon Water passes the Commission's 1% productivity hurdle in all years of the Water Plan regulatory period and in total. Consequently after allowing for the expected growth in customer numbers Wannon Water's operating costs decline by more than 1% in each year of the Water Plan 3 regulatory period.

6.2 OPERATING BUSINESS AS USUAL EXPENDITURE

Operating expenditure is the key component of the revenue requirement and is included in the year in which it is incurred.

Consistent with the Commission's principals, Wannon Water has assessed its operating expenditure by establishing a baseline or 'business as usual' (BAU) level of costs derived from its historical and current expenditure. Expenditure forecasts for the five years of the Water Plan 3 regulatory period have been prepared on the basis of remaining consistent in real terms with expenditure incurred during the 2012-13 financial year with the exception of the Environmental Contribution (increasing to \$2.6 million in 2013-14), electricity (7.25% above CPI) and the one off costs eliminated from the 2011-12 baseline year.

Wannon Water plans to achieve productivity improvements of 1% of adjusted operating expenditure (see section 6.3) in the delivery of its BAU levels of service in line with the Commission's Guidance Paper:

Table 6-2 Business as Usual Operating Expenditure outlines Wannon Water's forecasts of BAU operating expenditure for each year of the regulatory period. It also shows actual and forecast operating expenditure for 2011-12 and 2012-13 respectively.

Operating Expenditure Summary	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Water	20.06	20.61	20.39	20.37	20.44
Sewerage	15.76	16.20	16.02	16.01	16.06
Recycled Water	-	-	-	-	-
Waterways	-	-	-	-	-
Diversions	-	-	-	-	-
Bulk Water	-	-	-	-	-
Rural Water	-	-	-	-	-
Total Business as Usual	35.81	36.81	36.41	36.38	36.51
New Initiatives and Obligations	5.66	3.56	3.56	3.66	3.30
External Bulk Water Charges (excl. Temporary Purchases)	0.31	0.38	0.40	0.41	0.43
External Temporary Water Purchases	-	-	-	-	-
Licence Fees	0.23	0.23	0.23	0.23	0.23
Environment Contribution	2.49	2.42	2.36	2.29	2.23
Total Prescribed Operating Expenditure	44.50	43.41	42.95	42.98	42.71

Total BAU Operating Expenditure	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
WATER					
Operations & Maintenance	8.62	8.86	8.77	8.76	8.79
External Bulk Charges (excl. Temporary Purchases)	0.31	0.38	0.40	0.41	0.43
Treatment	3.21	3.30	3.26	3.26	3.27
Customer Service and Billing	1.40	1.44	1.43	1.43	1.43
GSL Payments	-	-	-	-	-
Licence Fees	-	-	-	-	-
Corporate	4.01	4.12	4.08	4.08	4.09
Other Operating Expenditure	2.81	2.89	2.85	2.85	2.86
Total Water	20.36	20.99	20.78	20.79	20.88

Total BAU Operating Expenditure	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
SEWERAGE					
Operations & Maintenance	4.73	4.86	4.81	4.80	4.82
External Bulk Charges (excl. Temporary Purchases)	-	-	-	-	-
Treatment	4.25	4.37	4.33	4.32	4.34
Customer Service and Billing	1.10	1.13	1.12	1.12	1.12
GSL Payments	-	-	-	-	-
Licence Fees	-	-	-	-	-
Corporate	3.15	3.24	3.20	3.20	3.21
Other Operating Expenditure	2.52	2.59	2.56	2.56	2.57
Total Sewerage	15.76	16.20	16.02	16.01	16.06
LICENCE FEES					
Essential Services Commission	0.04	0.04	0.04	0.04	0.04
Department of Human Services	0.02	0.02	0.02	0.02	0.02
Environment Protection Authority	0.17	0.17	0.17	0.17	0.17
Total Licence fees	0.23	0.23	0.23	0.23	0.23
ENVIRONMENT CONTRIBUTION	2.49	2.42	2.36	2.29	2.23

Table 6-2 Business as Usual Operating Expenditure

6.2.1 NEW OPERATING EXPENDITURE OBLIGATIONS

Table 6-3 Summary of New Obligations summarises a range of new costs (not exhaustive) as examples of new costs to be absorbed by the business. These costs have largely been

accommodated through productivity improvements or deferring capital works or operational initiatives.

Description	2013-18 (\$M)	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Carbon – cost of carbon pass through by electricity providers	2.53	0.41	0.44	0.52	0.56	0.60
Unfunded Defined Benefits Superannuation Contribution	1.46	1.46	-	-	-	-
Superannuation Guarantee Levy – increase from 9% to 11%	0.69	0.03	0.07	0.13	0.20	0.26
New operating expenditure from newly completed capital works	2.70	0.42	0.53	0.55	0.59	0.61
Decommissioning of bores	0.62	0.05	0.57	-	-	-
Property service pipes and sanitary drain services – new obligation resulting from Water Regulations	2.05	0.41	0.41	0.41	0.41	0.41

Table 6-3 Summary of New Obligations

Costs associated with additional obligations, functions or service levels are detailed in order to facilitate assessment. These additional obligations relate to new Government regulations and regulatory requirements, set by the Environment Protection Authority and the Department of Health including the ongoing costs associated with operating new infrastructure. The purpose of the detail is to provide

transparency to the Commission, Government, other regulators and customers of the estimated cost of new obligations and the impact on prices.

Changes to expenditure from Water Plan 2 to Water Plan 3 are largely driven by increased costs in the following areas.

6.2.2 ELECTRICITY COSTS

Wannon Water expects that electricity costs will increase significantly during the Water Plan 3 regulatory period due to flow-on impact of infrastructure upgrades and other issues within the power sector:

Electricity costs expressed in real terms relative to 2012 (in accordance with retail price indices in the Water Services

Association of Australia Energy Price Forecasts 2012 to 2032 and increased electricity consumption) indicate an increase in electricity costs of 29% in 2012-13. Electricity costs have been forecast to trend upwards by 10% plus CPI from 2014-15 through to 2017-18.

6.2.3 CARBON COSTS

Wannon Water has no specific proposals related to carbon cost mitigation. Wannon Water does not have individual facility or corporate greenhouse emissions that are likely to trigger National Greenhouse and Energy Reporting (NGER) requirements during the regulatory period.

Consequently Wannon Water is faced with absorbing additional costs embedded in transport and electricity costs.

An average increase of \$0.50M per year in electricity costs has been allowed for embedded carbon tax. An allowance of less than \$0.01M has been made for costs associated with transport. This increase in costs has been absorbed in the current pricing structure.

6.2.4 ENVIRONMENTAL CONTRIBUTION

The Environmental Contribution to be paid to the State Government for the 2013-14, 2014-15 and 2015-16 years increases to \$2.56M per year. This represents an annual increase of \$0.99M on the contribution paid by Wannon Water during the Water Plan 2 regulatory period.

It has been assumed for Water Plan revenue requirement purposes that the \$2.56M level will continue for the last two years of Water Plan 3 regulatory period.

Wannon Water will absorb this increase in the Environmental Contribution through productivity savings.

6.2.5 LOCAL AUTHORITIES SUPERANNUATION FUND CONTRIBUTION

As an employer of past and current employees who are members of the Vision Super Local Authorities Superannuation Fund Defined Benefit Plan, Wannon Water is liable for a portion of the unfunded liability of the Fund. As at 31 December 2011 the unfunded liability was \$453M. Wannon Water's share of this liability is \$1.46M, including contributions tax. The liability is payable as either:

- Equal annual instalments over a 15 year period from 1 July 2013; or
- As a lump sum on 1 July 2013; or
- Any combination of the two.

Wannon Water expects to pay the liability as a lump sum on 1 July 2013. It has been included in the 2013-14 operational expenditure projection.

Legislation to increase the Superannuation Guarantee Levy has passed through Federal Parliament. The increase in this levy will be phased in over the regulatory period, beginning with the initial increase from 9% to 9.5% effective 1 July 2013, rising to 11% for the year beginning 1 July 2018.

Wannon Water will absorb this increase in superannuation costs.

6.2.6 NEW OPERATING EXPENDITURE FROM CAPITAL WORKS

Ongoing costs associated with new infrastructure projects have been included in Water Plan 3. These costs are attributable to the following projects:

- Portland Water Reclamation Plant – \$1.71M
- Warrnambool Water Reclamation Plant Recycled Water System – \$0.17M
- Communication Equipment – \$0.12M

- Waste Separation Infrastructure – \$0.12M
- Safety Shower Maintenance – All WTP Sites – \$0.11M
- UV System Installations – WTP Purnim and Cavendish - \$0.11M
- Glenthompson WTP Upgrade - \$0.09M
- SCADA Data Management – \$0.05M



6.2.7 DECOMMISSIONING OF BORES

Two bores in Heywood and one in Portland have been identified as significant risks in terms of bore failure and/or aquifer cross-contamination. An amount of \$0.62M has

been included in the Water Plan 3 regulatory period to decommission all three bores.

6.2.8 INFORMATION TECHNOLOGY OPERATING COSTS

Wannon Water is satisfied that it has good information technology systems and sufficient information technology resources in place to maintain its information technology operating expenditure at around current levels of \$2.15M (2012-13) in real terms over the Water Plan 3 regulatory period.

The figures in Table 6-4 Information Technology Operating Costs include staff costs, licence fees and IT consumables.

Year	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Forecast	2.15	2.16	2.16	2.17	2.17

Table 6-4 Information Technology Operating Costs

6.2.9 LABOUR COSTS

Labour costs for the Water Plan 3 regulatory period are projected to increase by 2.5% consistent with current Government Wages Policy.

An allowance for superannuation contributions (see 6.2.5) has been made.

The number of full time equivalent positions remains constant at 216 over the 5 years of the Water Plan 3 regulatory period.

6.3 NEW EFFICIENCIES

6.3.1 WATER SAMPLING REVIEW

Wannon Water contracts an external laboratory service provider for all regulatory and operational testing for water and sewage. In 2011-12 expenditure for both water and sewage testing was \$1.73M.

Water Regulations 2005, Wannon Water's Drinking Water Risk Management Plan and the Environmental Protection Act 1970.

A review of water sampling frequency has been undertaken. The amount of water and sewage sampling will be reduced in 2012-13, and throughout Water Plan 3, to reduce costs without impacting on compliance with the Safe Drinking

As a result the 2012-13 budget was reduced to \$1.32M and this amount has been carried forward to each year of the Water Plan 3 regulatory period representing an efficiency saving of \$0.41M per year.

6.3.2 FIELD TECHNOLOGY INITIATIVES

In recent years Wannon Water has invested in Supervisory Control and Data Acquisition (SCADA) systems and a Mobile Information Management Systems (FOCUS) to improve efficiency and reduce risk.

The SCADA system provides real time information about the operating conditions of operational facilities, including alarms. The key benefits of SCADA system include:

- Reduced site attendance by being able to remotely ascertain operating conditions and being able to make some operational changes
- Improve operational data to make operational decisions and planning decisions
- Smart controls to utilise night pumping and other efficiency initiatives
- Improved alarm reporting which assists managing environmental and public health risks

A number of these benefits have already been captured over recent years. However, a greater focus is being placed over future years to capture additional efficiency benefits of the SCADA system.

The FOCUS system is used to allocate planned and unplanned maintenance activities to employees.

The key benefit of FOCUS includes:

- Reduced duplication of data entry of maintenance activities
- Reduced time to produce performance reports
- Improved quality of information for workforce utilisation and asset management purposes
- Improved scheduling of maintenance activities and better time utilisation of maintenance employees

As FOCUS has only been recently deployed, only the first two benefits listed above have been fully realised at this stage.

Wannon Water has formed working groups with the specific aims of capturing the benefits of both SCADA and FOCUS during 2012-13 and the Water Plan 3 regulatory period.

The projected savings resulting from these initiatives over the Water Plan 3 regulatory period is \$0.60M.

6.3.3 ENERGY EFFICIENCY INITIATIVES

An objective of progressively reducing electricity use of current systems by 2.5% by 2017-18 has been adopted and this is expected to deliver savings in the order of \$0.2M

during the Water Plan 3 regulatory period. Reduced electricity consumption due to these efficiencies is expected to be ongoing.

6.3.4 WATER LOSS REDUCTION

Wannon Water has adopted a per capita residential demand reduction target of 13% by 2015, and maintaining this level through to 2020. The major component of the demand reduction package, which is included in Wannon Water's Water Supply Demand Strategy 2012-2060, is leakage reduction (non-revenue water). Wannon Water has adopted a target reduction of 450ML by 2018. This equates to 13.4% of non-revenue water from the baseline year of 2010-11.

Wannon Water has established a Non-Revenue Water Group whose main responsibility is to implement the Action Plan contained in the Non-Revenue Water Reduction Strategy. A Non-Revenue Water Project Manager has been appointed to further facilitate this project.

The projected savings resulting from this initiative over the Water Plan 3 regulatory period is \$0.40M.

6.3.5 CUSTOMER RELATIONS INITIATIVES

Wannon Water has identified a number of initiatives to improve the efficiency and effectiveness of customer relations activities, including:

- Email of customer bills (where requested) in lieu of printing and postage of bills
- B-Pay View functionality to make it easy for customers (where requested) to make payments on-line
- Automating the Information Statement process to improve preparation time and accuracy
- Customer web interface which will enable customers to access information and services associated with their account, including payment history, water use and change of address

The above initiatives will reduce the administrative 'behind-the-scenes' processing and data entry costs currently undertaken by employees and improve efficiency of Wannon Water's services.

Wannon Water recognises that increasingly customers want to access relevant information and services via the web and mobile devices and will develop its systems to meet customer needs and improve efficiency.

The projected saving resulting from this initiative over the Water Plan 3 regulatory period is \$0.21M.

6.3.6 ENTERPRISE AGREEMENT INITIATIVES

Wannon Water has commenced negotiations for its next Enterprise Agreement commencing October 2013. It is

intended that this agreement include new efficiency initiatives and achieving the updated Service Performance Targets.

6.3.7 TRAINING AND DEVELOPMENT/PEOPLE STRATEGY

Wannon Water's continuous improvement approach has fostered positive attitudes towards learning, greater teamwork and increasing involvement of line managers in training, particularly as coaches and mentors. A range of learning and developmental programs are offered to support employees realise their full potential including Post Graduate and Masters studies in the areas of Water Resources Management, Engineering, Commerce and Spatial Information. Employees currently average a total of 76.72 hours in learning and development.

Wannon Water will continue to participate in community career development programs with regional secondary colleges, the Future Leaders of Industry Program, the Emerging Technologies Industry Program, VCE business students and Deakin University research partnerships.

Wannon Water has implemented a Leadership Development Program designed to build capability in areas such as leading change, managing performance, strong communication and reward and recognition. The program has enabled participants to better understand their leadership style and the impact it has on others.

The corporation's Engineering Scholarship program guarantees the availability of graduate civil engineers into our workforce. The Scholarship is awarded annually to a student residing in our service delivery area intending to study Civil Engineering and provides \$5,000 per year towards the cost of study expenses.

6.3.8 STRATEGIC PROCUREMENT INITIATIVES

Wannon Water shall continue to review areas of operational procurement for opportunities to implement changes that lead to improvements in productivity, guaranteed levels of service from external providers and reductions in overall cost.

Historically, Wannon Water has identified and implemented processes that resulted in cost reductions or productivity improvements of approximately \$150,000 per year over the past four years. The ongoing annual economic benefits to Wannon Water from the strategic procurement initiatives between 1 July 2008 and 30 June 2012 therefore exceed \$600,000 to date.

Whilst historical outcomes are not a precursor to the future, Wannon Water anticipates that there are still areas that, following review, shall yield further ongoing economic benefits.

The projected savings resulting from this initiative over the Water Plan 3 regulatory period is \$0.48M.

6.3.9 INTELLIGENT WATER NETWORKS

Wannon Water is an active participant in the Intelligent Water Network Program. The program is being facilitated via a cooperative model involving all Victorian water corporations and the Department of Sustainability and Environment.

The purpose is to progress investigation, research and trials into technological advancements, with the aim of improving the efficiency in the way water corporations manage assets and deliver services, ultimately to deliver greater customer and stakeholder value.

Wannon Water is represented in the strategy group, reference group and work groups. Wannon Water has made allowance in its forward projections of \$0.05M per year to contribute to the collective work of the Intelligent Water Network Program.

6.3.10 TECHNOLOGY ASSESSMENT GROUP (TAG)

Wannon Water is a member of the newly formed and water industry based Technology Assessment Group (TAG).

TAG has been in successful operation in the United Kingdom for many years and has resulted in significant productivity improvements and risk reduction outcomes within the UK water industry.

The role of the TAG consultants is to pre-screen the plethora of new technologies applicable to the water industry and

coordinate a water industry review of the most promising technologies for further investigation, possible trials, subsequent market deployment and uptake by water corporations Australia wide.

At this stage it is too early to identify specific innovations that may result. However, it is expected that during the Water Plan that there will be efficiency benefits associated with new technologies identified through TAG.

6.3.11 ASSET MANAGEMENT STRATEGY

The Asset Management Strategy documents how Wannon Water will continue to improve the effectiveness and efficiency of managing its assets as Wannon Water moves towards holistic life cycle management of its water supply and sewerage infrastructure.

This will build on the solid foundation of a complete and reliable asset register, improving knowledge of the condition and performance of assets and improvement in risk based and

optimised decision making for improved management of assets.

Complementing process improvements, the Strategy supports appropriate development in asset data and knowledge systems, along with the development of a proactive asset management culture in the organisation for improved asset management.

Savings will be realised as more rigorous processes are used to evaluate and improve asset management practices.

6.3.12 MAINTENANCE MANAGEMENT STRATEGY

Supporting the overarching improvement in asset management processes and practices, the Maintenance Management Strategy targets the specific area of improved maintenance management in Wannon Water:

The Strategy's objectives are to increase proactive maintenance, while in the long term, decrease reactive

maintenance activities through the introduction of planned maintenance programs, improved condition assessment and the progressive introduction of work order and backlog systems.

These developments will lead to efficiency gains and cost reductions in maintenance during the Water Plan 3 period.

6.3.13 HEALTH & WELLBEING PROGRAM

The Health & Wellbeing Program supplements Wannon Water's continued focus on providing a healthy & safe working environment.

The objectives of the Health & Wellbeing program are to increase both employee awareness of common health issues and to increase employee participation in activities that may prevent such health conditions or reduce their impact.

The participation of employees in the Health & Wellbeing program is expected to result in efficiency gains in the areas of absenteeism, output and a reduction in injury rates.

Wannon Water's Lost Time Injury Severity rate has been reduced from 17.65 in January 2011 to 2.36 in January 2012, an 87% reduction.

Work cover premiums have decreased by more than \$50,000 despite Wannon Water's remuneration increasing by almost \$5M over Water Plan 2.

The claims cost rate has fallen from 3.37% to 1.30% and the duration rate (average days of compensation paid pre standard claim) has fallen from 147.80 in 2007-08 to 12.80 in 2011-12.

6.3.14 WASTE MANAGEMENT

Based on assessments of 58 representative sites conducted during 2010-11, Wannon Water currently produces an estimated 700 tonnes or more of waste per year of which 95% goes to landfill. The Waste Footprint Report that summarised these surveys found that current practices are not effectively separating all materials for reuse or recycling in many cases, and the full costs of waste disposal and management have not been quantified.

Recent improvements have been directed to identifying these costs in detail incorporating them into future finance management systems, as well as preparing waste action plans across the business. Key organisational recommendations

have been endorsed that recognise the rising costs of landfill disposal, increasingly stringent environmental regulations and customer expectations for sustainable business practices.

The desirable outcomes being pursued in Water Plan 3 include all corporate offices and depots having appropriate, consistent facilities for effective waste separation and recycling, enabling maximum diversion of waste disposal from landfill and enabling best resource recovery and reuse outcomes for Wannon Water offices.

The projected savings resulting from this initiative over the Water Plan 3 regulatory period is \$0.04M.

6.3.15 AQUACULTURE TO OFFSET LAGOON DE-SLUDGING

Wannon Water will further develop aquaculture as a cost effective means of reducing the costs of mechanically de-sludging sewerage treatment lagoons and sludge transportation costs during the Water Plan 3 regulatory period.

Goldfish consume organisms that grow in the nutrient-rich organic material in sewage and research undertaken in association with Deakin University has shown this can aid the

treatment process, substantially reducing the amount of sludge by-product from the treatment process and energy used in treating sewage and improving recycled water quality. Longer term, this is likely to provide significant cost savings for Wannon Water by using aquaculture on a commercial scale to minimise the need to de-sludge sewage effluent lagoons.

6.3.16 RESEARCH AND DEVELOPMENT

Wannon Water is committed to research that will develop knowledge and deliver value-for-money solutions to issues that impact on the delivery of sustainable water services across south-west Victoria. Research needs have been identified and prioritised consistent with the vision, mission and values of Wannon Water and the Statement of Obligations issued by the Minister for Water.

The proposed investment in research and development is documented in the "Research Priorities Statement 2013-2018" and includes collaborative and partnership-based projects wherever possible. An example is our membership of Water Quality Research Australia (WQRA) - a not-for-profit company established and funded by its members to undertake collaborative research of national application of drinking water quality, recycled water and relevant areas of wastewater management. WQRA's primary aims are to coordinate and manage a structured program of collaborative research in water quality and to ensure that the knowledge generated is

transferred to industry. WQRA's focus is on national issues in water quality with an emphasis on improving public health for Australians.

Additional research priorities for the regulatory period include an emphasis on improving the efficiency and compliance performance of operations and reducing asset management costs.

Wannon Water was successful in attracting external funding for research during Water Plan 2 through agencies such as the Smart Water Fund and will seek to continue this in the Water Plan 3 regulatory period.

The intended projects are also designed to include opportunities to continually improve the technical and management capability of Wannon Water employees through their participation in research and development.

Wannon Water will expend \$0.15M per year on this initiative.

6.4 RISK MANAGEMENT FRAMEWORK

Wannon Water has a Risk Management Framework based on the principles of AS/NZS ISO 31000:2009 Risk Management - Principles and Guidelines. This Framework describes the processes that Wannon Water uses to identify, analyse, report and monitor risks. Wannon Water reports significant corporate risks to the Board on a quarterly basis and maintains contingency plans that are documented and tested.

Projects included in Water Plan 3 address current significant corporate risks. Approximately \$3.6M has been allocated to improve risk controls and reduce risk ratings for these higher level risks.

In addition all projects identified in the Water Plan 3 have been risk assessed using Wannon Water's Project Risk Assessment Guidelines. Approximately \$30M of capital investment has been allocated to some 278 projects where the risk of not completing the projects was assessed as Extreme or Very High. The value of these projects makes up 25% of the total capital investment included in Water Plan 3 and under the scenario assuming these projects are completed all current Extreme and Very High risks will be mitigated.

6.5 CAPITAL EXPENDITURE WATER PLAN 3

6.5.1 HISTORICAL CAPITAL EXPENDITURE

Wannon Water has a proven track record of completing its Capital Expenditure Programs for the first two regulatory periods on time and on budget. Details on the Capital

Expenditure Program for the Water Plan 2 regulatory period are contained in Sections 4.5 and 4.6.

6.5.2 PROPOSED CAPITAL EXPENDITURE

Wannon Water follows a well-structured and disciplined Project Investment Plan Policy and Procedure to develop the capital expenditure program for inclusion in Water Plan 3. Projects for inclusion in Water Plan 3 must satisfy one or more of the following project drivers:

- Regulatory Compliance
- OHS Risk Reduction
- Level of Service
- New Systems
- Growth
- Asset Replacement/Refurbishment
- Corporate Services
- Efficiency Improvement.

This process confirms Wannon Water's commitment to its customers, regulators and other stakeholders to implement an efficient and effective capital expenditure program that ensures that service levels are maintained.

The capital expenditure program was prioritised according to the level of risk, the importance of the project driver and its implication for the expenditure program. All cost estimates are

based on P50 cost assumptions, except those for the top 10 projects which also considered P5 and P95 cost assumptions.

Major projects were referred to our contracted Engineering Consultant, GHD Pty Ltd (GHD) for review and development to the Concept Design stage. Various options for each project were analysed as part of this process. Several joint workshops between relevant internal stakeholders at Wannon Water and GHD were held to facilitate this process. Budgets for more complex projects were also reviewed by GHD to ensure that they were robust.

A business case has been prepared for every project that is estimated at \$100,000 or greater to further ensure the robustness and efficiency of the capital expenditure program.

Table 6-5 Capital Expenditure Forecasts sets out the cost of the program over the five years of the Water Plan 3 regulatory period and the following five years to 2023. This table includes Wannon Water's Business As Usual (BAU) capital expenditure together with capital expenditure related to new or changed service outcomes (New).

Year	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)	2018-19 (\$M)	2019-20 (\$M)	2020-21 (\$M)	2021-22 (\$M)	2022-23 (\$M)
BAU	13.61	21.87	15.87	21.56	13.73	14.66	13.66	14.68	23.44	22.65
New	7.28	3.33	5.77	1.31	4.71	3.91	5.75	9.37	3.95	3.84
Total	20.89	25.20	21.64	22.87	18.44	18.57	19.41	24.05	27.39	26.49

Table 6-5 Capital Expenditure Forecasts

The total capital expenditure for the third regulatory period is \$109.04M and for the fourth regulatory period is \$115.91M.

Wannon Water will deliver this program by utilising its own experienced project management team. Wannon Water has also had in place for six years a Preferred Engineering

Consultancy contract to further facilitate the delivery of the capital works program on time and within budget. Wannon Water also included funding in Water Plan 2 for design of projects to be constructed in 2013-14.



6.5.3 KEY DRIVERS FOR CAPITAL WORKS

Wannon Water’s project drivers are listed above in Section 6.5.2. Water Plan 2 had an emphasis on projects with levels of service, asset replacement/refurbishment and regulatory compliance as the main drivers (67% of all projects). For Water Plan 3 asset replacement/refurbishment and regulatory compliance are the main drivers (74% of all projects). This reflects Wannon Water’s maturing asset management systems which have identified the renewal of assets as a priority for the next five years. The regulatory compliance projects are based around meeting the EPA’s requirements for:

- Preventing spills from occurring at Sewerage Pump Stations in less than the 1 in 5 year rainfall events
- Preventing Section 30A discharges to the environment in no less than the 95 percentile rainfall year

Other regulatory compliance projects include meeting the requirements of the 2015 release of upgraded Safe Water Drinking Regulations with regard to revised filter performance turbidity levels.

Capital expenditure by project driver is shown in Figure 6-2 Capital Expenditure by Project Driver

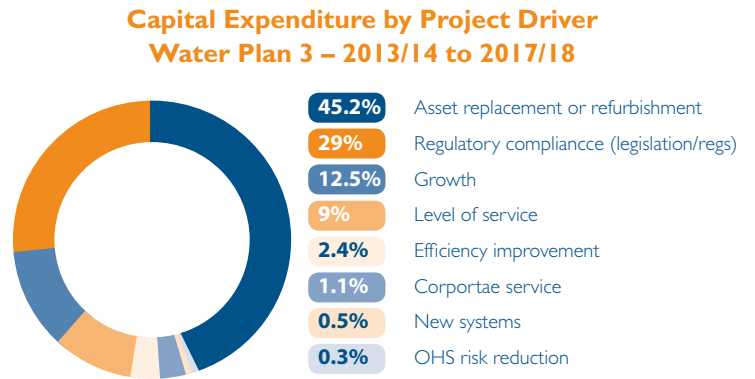


Figure 6-2 Capital Expenditure by Project Driver

6.5.4 TOP 10 CAPITAL PROJECTS

Table 6-6 Top Ten Capital Projects details the top 10 projects (by total expenditure) to be delivered over the Water Plan 3 regulatory period. This table includes:

- The reason for and brief description of the project
- The driver for the project
- The outcomes to be delivered by the project
- The estimated cost of the project.

In each case it is assumed that the project outcomes will be delivered at the end of the last financial year in which funding is indicated.

A business case including a cost-benefit and risk analysis assessment has been prepared for each project.

Project and Reason	Project Driver & Risk Rating of not doing project	Project Description	Outputs to be achieved within regulatory period	Delivery Date	Capital Cost \$M
Heywood Water Reclamation Plant Irrigation Works To avoid EPA Section 30A discharges	Regulatory Compliance (EPA) Very high risk	80 ha expansion of irrigation area and construction of an additional 201ML winter storage and associated pipework and pumps	Detailed design in 2015-16 and construction of works in 2016-17.	Construction works scheduled for completion in 2016-17	4.80
Hamilton Water Reclamation Plant additional winter storage and irrigation area To avoid EPA Section 30A discharges	Regulatory Compliance (EPA) High risk	Increasing the irrigation area by 58 ha on Wannon Water land to the west of the Water Reclamation Plant and construction of an additional 150 ML winter storage and associated pipework and pumps	Detailed design in 2014-15 and construction of works in 2016-17	Construction works scheduled for completion in 2016-17	3.77
Casterton Water Treatment Plant Install Clarifier To ensure compliance with the <i>Safe Drinking Water Regulations 2005</i>	Regulatory Compliance (DOH) High risk	Design and construct new clarifier and associated pipework, chemical dosing and pumps.	Detailed design in 2012-13 Construction in 2013-14	Construction works scheduled for completion in 2013-14	3.19
Curdie Vale bore construction To ensure continuity of supply during a wildfire event occurring in the Otway’s	Level of service (SoO) Very high risk	Construct new 10 ML/day production bore at the existing bore site and connecting pipework, pumps and tank to deliver water to the South Otway Pipeline.	Detailed design underway for construction in 2013-14	Construction works scheduled for completion in 2013-14	2.99

Project and Reason	Project Driver & Risk Rating of not doing project	Project Description	Outputs to be achieved within regulatory period	Delivery Date	Capital Cost \$M
Construct new bore at Wyatt St Portland To ensure continuity of water supply to Portland should the Bald Hill production bores fail	Level of service (SoO) Medium risk	Design and construct a new bore at Wyatt Street site to replace the existing bore and associated pipework	Detailed design in 2013-14 and construction of works in 2014-15	Construction works scheduled for completion in 2014-15	2.96
Water Tower & Pump Station in Wangoom Rd Warrnambool To supply water to growth area	Growth Very high risk	New pump station and 2,940m of 300 rising main to new elevated tower	Acquisition of land & detailed design in 2014-15 to 2015-16; Construction in 2016-17	Construction of works scheduled for completion in 2016-17	2.76
Portland - Sewer Replacement/ Refurbishment To replace/refurbish aging sewer mains and manholes	Asset replacement or refurbishment (SoO) Medium risk	Reticulation sewer refurbishment/ replacement works including pipeline replacement/relining and repair/replacement of manholes following CCTV inspections	Approximately 10.8 km of sewer pipelines and manholes to be replaced/refurbished	Ongoing program over the Water Plan 3 regulatory period	2.68
Water tower and pump station, Wollaston Road Warrnambool To provide water supply to growth area	Growth High risk	Construction of 400kL elevated tower; 600m extension of 225mm diameter connecting water main and pumping station.	Detailed design in 2014-15 and Construction in 2015-16	Construction works scheduled for completion in 2015-16	2.35
Port Fairy – Sewers Replacement/ Refurbishment To replace/refurbish aging sewer mains and manholes	Asset replacement or refurbishment (SoO) Medium risk	Reticulation sewer refurbishment/ replacement works including pipeline replacement/relining and repair/replacement of manholes following CCTV inspections	Approximately 9.1 km of sewer pipelines and manholes to be replaced/refurbished	Ongoing program over the Water Plan 3 regulatory period	2.29
Cobden Water Reclamation Plant - additional 70ML winter storage. To mitigate EPA Section 30A discharges	Regulatory Compliance (EPA) High risk	Construct additional 70ML winter storage and additional 30 Ha irrigation area	Detailed design in 2014-15 and construction of works in 2017-18	Construction works scheduled for completion in 2017-18	2.12

* Environmental Protection Authority (EPA).

* Department of Health (DOH)

* Statement of Obligations (SoO)

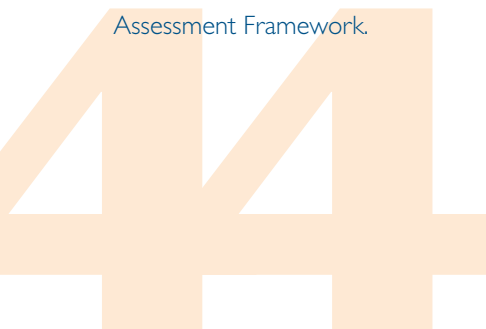
Table 6-6 Top Ten Capital Projects

6.5.5 RISK CONSIDERATION – CAPITAL WORKS

Wannon Water has a robust asset management system in place that enables appropriate balance between new and replacement of assets or the refurbishment of assets to be maintained. The objective of Wannon Water's Asset Management Policy is to manage infrastructure assets in a way which will meet customer needs, protect the environment, public, workforce and property and optimise the value of the assets to Wannon Water over the asset's total lifecycle.

The inherent risk of not undertaking individual projects was assessed in accordance with Wannon Water's Project Risk Assessment Framework.

The selection of projects for inclusion in the capital expenditure program is detailed in the Project Investment Plan Policy. This policy ensures that priority is given to projects with an extreme, very high or high inherent risk rating. It also specifies the priority of projects by driver for those projects with an equal risk rating.



6.6 WEIGHTED AVERAGE COST OF CAPITAL

The weighted average cost of capital (WACC) is the return that Wannon Water seeks to earn on its Regulatory Asset Base (RAB).

The proposed rate of return sought by Wannon Water is 5.1%, being the indicative rate provided by the Commission. The Commission utilises the capital asset pricing model in calculating the WACC. Table 6-7 WACC Parameters details the individual parameters adopted.

It is noted the Commission may release an updated WACC for use in the final Water Plan 3 (per 2013 Water Price Review, Guidance on Water Plans October 2011).

WACC assumptions	Water Plan 3 forecast
Parameters	
Risk Free Rate (Real)	1.40%
Debt Premium	3.50%
Equity Premium	6.00%
Equity Beta	0.65
Gearing (Debt/Assets)	60.00%
Forecast Inflation	2.75%
Franking credit value	0.50
'Vanilla' After Tax WACC (Real)	5.10%

Table 6-7 WACC Parameters

6.7 FINANCING CAPITAL INVESTMENTS

The RAB represents a register of assets used in providing the regulated services and is used to calculate the return on investment that Wannon Water includes in the revenue requirement. This model of regulation prescribes that all capital investments will generate a financial return, and hence flow through to customers' tariffs.

Under the provisions of the Water Industry Regulatory Order (WIRO) businesses may recover the costs of financing existing

and new investments through:

- earning a return on the value of the RAB (i.e. weighted average cost of credit multiplied by the RAB)
- a return of the value of the RAB (i.e. regulatory depreciation).

Debt is incurred to cover the shortfall between cash generated from operations and the capital investment program.

6.7.1 UPDATING THE RAB

The value of the initial RAB (at 1 July 2004) was set by the Minister for Water, Environment and Climate Change at \$89M. Since then the RAB has been adjusted annually for capital expenditure, proceeds from disposals, regulatory depreciation and contributions.

The value of the RAB at the start of the third regulatory period has been calculated based on actual outcomes for 2008-12 and the forecast outcome for 2012-13. The critical driver of RAB is capital expenditure. Wannon Water is confident the estimates for the balance of the second regulatory period are accurate and deliverable.



6.7.2 ROLLING FORWARD THE RAB

Wannon Water has forecast the value of the RAB for each year of the third regulatory period. The forecast reflects the estimate of the capital expenditure, capital contributions,

disposals and regulatory depreciation. Wannon Water's forecast RAB during the regulatory period is outlined in Table 6-8 Rolled Forward RAB:

Rolled Forward Asset Base	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Opening Asset Base	250.59	260.89	277.22	289.51	302.82
Plus: Gross Capital Expenditure	20.89	25.20	21.64	22.87	18.44
Less: Government Contributions	0.05	-	0.10	-	-
Less: Customer Contributions	0.54	0.54	0.54	0.54	0.54
Less: Proceeds from Disposals	1.36	0.48	0.37	0.41	0.39
Less: Regulatory Depreciation	8.64	7.84	8.34	8.62	8.42
Closing Asset Base	260.89	277.22	289.51	302.82	311.90

Table 6-8 Rolled Forward RAB

Contributions reflect amounts forecast from third parties as a contribution towards the construction of assets. Mostly, these contributions relate to infrastructure assets specifically operated by Wannon Water for the third party.

Customer contributions are derived from new and existing customers contributing to the costs of connecting to existing water and sewer networks, also known as New Customer

Contributions (NCC's). Wannon Water has adopted the industry position as put forward by the Commission in respect to NCC's.

Proceeds from asset disposals predominantly relate to the changeover of Wannon Water's motor vehicle fleet. Wannon Water proposes to sell surplus land parcels in 2013-14.

6.7.3 REGULATORY DEPRECIATION

Regulatory depreciation has been calculated consistent with the approach adopted in the Water Plan 2 regulatory period, that is fixed assets have been depreciated using a straight line approach over the economic useful life of the asset.

The breakdown of existing assets into remaining lives is provided in Table 6-9 Regulatory Depreciation below. It highlights that 73% of Wannon Water assets have a remaining life of over 50 years.

Depreciation of new assets is calculated on the economic useful lives shown in Table 6-10 Asset Class Useful Lives.

Class	Useful Life (Years)
Bores, Weirs, Water Towers & Storage Tanks	40
Reticulation Network & Trunk Sewers	100
Communication and Computer Equipment & Software	3
Office Equipment and Plant and Equipment	20
Pumping Stations	40
Reservoirs and Service Basins	100
Treatment Plants	80
Water Meters	20

Table 6-10 Asset Class Useful Lives

Asset Class	Book Value (\$M)	% of Total
1 yr	2.15	0.8%
2yrs	1.12	0.4%
3yrs	0.08	0.0%
4yrs	0.13	0.1%
5yrs	0.65	0.3%
6yrs	0.90	0.4%
7yrs	1.46	0.6%
8yrs	1.51	0.6%
9yrs	1.86	0.7%
10yrs	0.70	0.3%
11-20yrs	13.88	5.5%
21-30yrs	13.24	5.2%
31-40yrs	15.70	6.2%
41-50yrs	14.97	5.9%
51-60yrs	30.16	11.9%
61-70yrs	37.67	14.9%
71-80yrs	62.83	24.8%
81-90yrs	10.13	4.0%
91-100yrs	42.87	16.9%
101-110yrs	1.01	0.4%
111-120yrs	0.32	0.1%
121-130yrs	0.00	0.0%
Total Assets	253.35	

Table 6-9 Regulatory Depreciation



Regulatory depreciation has been calculated as shown in Table 6-1 | Regulatory Depreciation.

Rolled Forward Asset Base	2013-14 (\$M)	2014-15 (\$M)	2015-16 (\$M)	2016-17 (\$M)	2017-18 (\$M)
Opening Asset Base	250.59	260.89	277.22	289.51	302.82
Closing Asset Base	260.89	277.22	289.51	302.82	311.90
Depreciation Rate of Existing Assets					
Regulatory Depreciation - Existing	7.85	5.72	5.16	5.14	5.10
Regulatory Depreciation - New Assets	0.79	2.12	3.17	3.48	3.32
Regulatory Depreciation - Total	8.64	7.84	8.34	8.62	8.42

Table 6-1 | Regulatory Depreciation

6.8 DEBT REDUCTION

Wannon Water is forecasting to reduce its debt by 2.25% (\$2.12M) during the regulatory period.

The value of the revenue for financing the cost of these borrowings is included in the WACC, which is applied to the

RAB. Total borrowings of \$92.15M are forecast by the end of the Water Plan 3 regulatory period.

6.9 TAXATION

The Commission's model to determine the revenue requirement allows Wannon Water to recoup the costs of company tax (payments under the National Tax Equivalent Regime (NTER)) during the regulatory period. Wannon

Water is carrying forward considerable taxation losses and will therefore not be liable to make NTER payments during the Water Plan 3 period. As such, this component of the revenue requirement is zero.

6.10 TEN YEAR ROLL FORWARD

Wannon Water is forecasting CPI only (0% real per year) tariff increases in the fourth regulatory period (2018-19 to 2022-23).

It is not expected there will be any items that significantly increase operating expenditure during this period. The Corporation is again targeting an annual 1 per cent efficiency target during the fourth regulatory period. Revenue requirement during the fourth regulatory period is projected to be \$354M.

An average annual customer growth rate of 0.96%, an average annual growth in demand of 0.70% and capital expenditure totalling \$116M has been assumed during the fourth regulatory period.

Wannon Water is proposing to reduce debt further by 9.39% (\$8.65M) during the fourth regulatory period to total borrowings of \$83.50M at the end of the Water Plan 4 regulatory period.

7 REVENUE REQUIREMENT FOR WATER PLAN 3

7.1 DEMAND FORECASTS

Wannon Water demand forecasts are documented in its 2012-2060 Water Supply Demand Strategy. The methodology included:

- Climate-corrected base year of 2009-10
- Analysis of trends and incorporation of population forecasts as described in Section 7.9 below
- Separate forecasts for residential, non-residential, rural, and major customer consumption for each of Wannon Water's 14 supply systems
- A volumetric non-revenue water reduction target of 450ML

The bulk water forecast is for water entering the reticulation network. The raw water forecast is for water extracted from the environment. The forecasts for the combined supply systems are shown in Table 7-2 Demand Forecasts from Water Supply Demand Strategy 2012-60.

Demand for the Water Plan 3 regulatory period has been projected on the basis of the 2012-60 Water Supply Demand Strategy. The strategy predicted a total demand of 11,403ML for 2010-11 and actual demand was 11,402ML which is a very good correlation. This fact gives some confidence that the balance of the demand projections are reliable.

The 2012-60 Water Supply Demand Strategy projects a reduction in demand on 2013-14 for the 2014-15 and 2015-16 years and a subsequent recovery over the final three years of Water Plan 3. It is thought that the impact of media and demand reduction initiatives, that were implemented prior to a resumption of more normal demand, will continue for several years. The change is shown in Table 7-1 Change in Consumption expected over WP3.

Year	2012-13 (ML)	2013-14 (ML)	2014-15 (ML)	2015-16 (ML)	2016-17 (ML)	2017-18 (ML)
Consumption	11,449	11,412	11,350	11,440	11,532	11,626
% change	0.40%	-0.32%	-0.54%	0.79%	0.81%	0.81%

Table 7-1 Change in Consumption expected over WP3

Wannon Water is mindful of the reduction in water demand on a per household basis and has resisted the temptation to increase the emphasis on the volumetric component of the water bill. Wannon Water has therefore maintained the current balance between the fixed water service charge and

water usage tariffs at about 36% service charge and 64% water volume of the total water account. It is anticipated that as demand rises per household in the later stages of Water Plan 3, the mix of service and usage charges will rebalance towards the desired 30% to 70% ratio.

Category	2009/10 climate corrected baseline ML	2010-11 (ML)	2011-12 (ML)	2012-13 (ML)	2013-14 (ML)	2014-15 (ML)	2015-16 (ML)	2016-17 (ML)	2017-18 (ML)	2018-19 (ML)	2019-20 (ML)	2020-21 (ML)	2021-22 (ML)	2022-23 (ML)
Residential	5342	5173	5115	5055	4979	4882	4936	4987	5039	5091	5144	5197	5246	5295
Non-residential	1885	1888	1916	1944	1972	1995	2017	2038	2060	2082	2104	2126	2146	2167
Rural	1907	1907	1907	1907	1907	1907	1907	1907	1907	1907	1907	1907	1907	1907
Major	2476	2494	2419	2496	2508	2521	2534	2554	2574	2595	2615	2635	2635	2635
Water Cartage	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Total consumption	11656	11507	11403	11449	11412	11350	11440	11532	11626	11720	11815	11911	11980	12050
NRW	2333	2282	2231	2180	2130	2079	2028	1977	1926	1926	1926	1926	1926	1926
Bulk Water	13990	13789	13634	13629	13541	13429	13468	13509	13552	13646	13741	13837	13906	13976
Headworks losses	1905	1905	1905	1905	1905	1905	1905	1905	1905	1905	1905	1905	1905	1905
Raw Water	15895	15694	15539	15534	15446	15333	15372	15414	15457	15551	15646	15742	15811	15881

Table 7-2 Demand Forecasts from Water Supply Demand Strategy



7.2 GROWTH IN CONNECTIONS

The projected change in water demand over Water Plan 3 incorporates the anticipated growth in connections. Water Plan 3 is based on 1.06% growth in property connections, in line with recent historical outcomes and the summary outcome of

the Water Supply Demand Strategy for 2011-12 to 2017-18. Table 7-3 Growth in Connections by Water Pricing Groups demonstrates the anticipated growth over six years.

7.3 FORECAST GROWTH IN CONNECTIONS

Table 7.3 also shows anticipated growth in connections by water pricing group. Group A which includes Warrnambool and Portland has modest growth, as does Group C which includes coastal areas of Port Campbell and Peterborough.

However, Group B including Hamilton has less growth potential and the far west towns in Group D have limited growth prospects. Growth rates are derived from the Victoria in Future 2008 projections for number of households.

Group	2011-12 (No.)	2012-13 (No.)	2013-14 (No.)	2014-15 (No.)	2015-16 (No.)	2016-17 (No.)	2017-18 (No.)
Group A Growth	30,824	31,200 1.22%	31,581 1.22%	31,966 1.22%	32,356 1.22%	32,725 1.14%	33,098 1.14%
Group B Growth	6,526	6,563 0.56%	6,599 0.56%	6,636 0.56%	6,673 0.56%	6,711 0.57%	6,750 0.57%
Group C Growth	1,214	1,231 1.38%	1,248 1.39%	1,265 1.39%	1,283 1.39%	1,297 1.13%	1,312 1.13%
Group D Growth	2,235	2,237 0.08%	2,239 0.08%	2,240 0.08%	2,242 0.08%	2,242 -0.02%	2,241 -0.02%
Darlington Group E Growth	22	22 0.03%	22 0.03%	22 0.03%	22 0.03%	22 0.03%	22 0.03%
Total Properties	40,821	41,252	41,688	42,130	42,576	42,997	43,423
2012-13 to 2017-18 Average Growth Rate							1.0524%
2011-12 to 2017-18 Average Growth Rate							1.062%

Table 7-3 Growth in Connections by Water Pricing Groups

7.4 OTHER DEMAND ISSUES – RISK

Demand projections in the Water Supply Demand Strategy 2012-2060 incorporate low, median, and high growth scenarios

to give bounds to the likely pattern of future demand. Further information is contained in the Strategy.

7.5 DEMAND BOUNCE BACK

Wannon Water experienced a substantial reduction in water demand during the Water Plan 2 regulatory period across all of its water supply systems including those systems (the majority) which did not have water restrictions applied. Only the Hamilton, Balmoral and Glenthompson systems had water restrictions for a time during this period.

To determine the level of bounce back in demand now that water restrictions have been removed, Wannon Water projected what the Hamilton residential demand would have been in the absence of water restrictions. The same residential demand decline percentage that occurred at nearby Casterton, which did not have restrictions during the extended dry period, was applied to Hamilton.

Communities that experienced higher level water restrictions have a heightened awareness of the need to conserve water. At Hamilton some of the community installed grey water systems,

rainwater tanks and other water conservation investments that will continue to save water.

To account for this an additional 5% reduction in demand has been assumed for Hamilton and towns serviced by the same system. This reduced Hamilton's unrestricted base year residential demand to 167kL per year which is 12.8% higher than the observed (restricted) household consumption of 148kL per year. The 12.8% factor is phased in over three years (2011-12 to 2013-14 following the low consumption in 2010-11) to reflect a gradual response to the removal of water restrictions.

This approach is also taken for Hamilton non-residential customers and Balmoral and Glenthompson customers.

Further information is contained in Section 4 of Wannon Water's Water Supply Demand Strategy 2012-2060.

7.6 TRADE WASTE DEMAND

Variation in trade waste demand is difficult to predict but does occur as a result of:

- Steady growth in minor trade waste customers
- Relatively minor production variation of major trade waste customers as they strive meet market demand
- Market exit of major trade waste customers
- Major production investment of existing or new major trade waste customers
- Recycling initiatives of major trade waste customers

Minor trade waste customer growth has been aligned with the growth of non-residential customers.

Production variation of major trade waste customers is often conditional on global market forces and supply contacts. No allowance has been included in future trade waste forecasts to account for this market volatility.

Water Plan 3 assumes that all the existing major customers continue to remain operational for the regulatory period.

Consultation with major trade waste customers indicates that some customers have or are considering internal water recycling projects as a means of increasing production efficiency. Initial feedback from these customers is that the satisfactory business case for an internal recycling scheme is unable to be achieved without third party capital funding. As a consequence Wannon Water has not foreshadowed a significant reduction in demand (and revenue) from major trade waste customers undertaking recycling initiatives.

Wannon Water is unaware of any new significant trade waste customers or expansion of an existing customer that will materially impact trade waste demand (and revenue) during Water Plan 3.

7.7 RECYCLED WATER DEMAND

Demand for recycled water in Wannon Water's service area is primarily driven by industry and agricultural reuse to land. The climate within Wannon Water's region provides good rainfall in a normal year, hence the requirement for irrigation is not as high as in other parts of Victoria.

Reuse is currently approximately 22% of total treated effluent with all inland Water Reclamation Plants reuse at 100% in a normal year. Wannon Water is required to have a management framework enabling the reuse of all effluent up to a 90th percentile wet year. Section 15.1 outlines projects to increase storage capacity and hence availability of recycled water. These are scheduled for 2017-18 of Water Plan 3. Given this timing, Wannon Water expects agricultural demand for recycled water to remain similar to that experienced during the current regulatory period.

There are no new projects planned to increase the current level of industrial reuse. Current industrial customer demand is forecast to remain stable throughout the regulatory

period, subject to the individual investment decision of those customers. Section 15.3 provides further discussion of the strategic drivers and analysis of options for reuse derived from Wannon Water's Sewerage System Management Plan.

Increasing overall use of recycled water above 22% requires reuse from one or more of Wannon Water's coastal water reclamation plants. A recent review of recycled water opportunities in the Warrnambool region commissioned by Wannon Water identified salinity as one of the core water quality parameters impacting the commercial viability of any proposed project. The decision to postpone the Warrnambool Water Reclamation Plant 5th cell project until Water Plan 4 directly impacts on Wannon Water's ability to cost-effectively produce large volumes of water with the necessary salinity level for recycling. As such, the timing of a major recycled water project based on treated effluent from the Warrnambool Water Reclamation Plant is tied to future decisions on augmentation of the plant.

7.8 NEW CUSTOMER CONTRIBUTIONS GROWTH

Wannon Water has estimated growth of new properties based on growth forecasts within the Water Supply and Demand Strategy 2012-60.

Revenue has been estimated based on the continuance of the current charges. However, it is noted that Wannon Water is

to provide new revenue estimates in December 2012 based on the pricing principles detailed in the Commission's recently released *Guidance Paper for New Customer Contribution*, along with a transition plan and negotiating framework.



7.9 POPULATION PROJECTIONS AND CHANGES IN CONSUMPTION

Work for the Water Supply Demand Strategy 2012-60 identified a recent 4.5kL (2.7%) annual reduction per connection in residential use in Warrnambool, the largest city in the region. The baseline demand projection applies this reduction to all residential use out to 2014-15. Trends in rural and non-residential use did not give a strong indication of what will happen into the future and the baseline demand projection assumes that per connection use will remain constant. Additionally, the baseline assumes that the number of major and rural connections will remain constant into the future.

Wannon Water has 13 customers each using more than 30ML per year with total demand of 2,502ML in 2009-10 compared to the 14 major customers and 3,133ML in 2005-06.

Wannon Water sought input from major customers so as to identify patterns of growth. A number of major customers are exploring opportunities for water use efficiency. This is balanced by growth, particularly in the dairy processing industry. The projections in the Water Supply Demand Strategy 2012-60 are based on observed trends in demand from 2006-11 and on the input gained from customer consultation.

Growth in residential connections is from Victoria in Future 2008 and this growth was applied to both residential and non-residential connections in the forecast.



Appendix G contains Wannon Water's regulated tariffs for Water Plan 3 regulatory period.

8.1 CHANGE IN TARIFF STRUCTURE

8.1.1 TIERED VOLUME CHARGES FOR RESIDENTIAL CUSTOMERS

Consistent with the majority of customer feedback received on the *Water Plan 3 Residential Customer Discussion Paper*, Wannon Water has resolved to retain tiered water usage charges for residential customers for the Water Plan 3 regulatory period. Most residential customers supported retention of tiered usage charges.

Residential customers appreciate that the first 40kL of water consumed per quarter is at a 17% price discount and any

move away from tiered tariffs to a single volumetric tariff would see this benefit removed. Secondly, there remains a strong feeling within the community that residential customers consuming larger volumes of water should pay a higher price for their high usage.

Accordingly Wannon Water will retain tiered water usage charges for residential customers.

Refer Section 5.2 for detail on consultation undertaken.

8.1.2 REDUCING TARIFF PRICING COMPLEXITY

The current tariff pricing structures are a product of history following the merger of the three local water authorities in 2005. The number of water and sewerage prices was reduced in the Water Plan 2 regulatory period by grouping water and sewerage tariffs into 5 water and 5 sewerage tariff groups. Cities and towns that shared common water systems or had similar cost structures were grouped within a common tariff group.

Consistent with customer feedback on the Water Plan 3 Residential Customer Discussion Paper Wannon Water has resolved to further reduce tariff price complexity by merging those tariff groups with similar prices.

8.1.3 REDUCTION IN TARIFF GROUPS – WATER

The customer feedback from the consultation on the *Water Plan 3 Residential Customer Discussion Paper* indicated general support for the merger of water tariff groups, but not where the tariffs were structurally different.

Current Water Groups, 1, 2 and 3 were based on 30% fixed service charge and 70% water volume charge, whereas Water Groups 4 and 5 (being holiday and "tank" towns) were based on 50% service charge and 50% water volume charge.

Movements in the ratio of volume and fixed service fees are more fully discussed in Section 3.3.3 Residential Water Usage Decline.

For the Water Plan 3 regulatory period Water Groups 1 and 2 have been merged to form new Water Tariff Group A due to price proximity.

This was achieved by reducing Water Group 1 prices by 0.0128% (both water service and water usage prices) and increasing Water Group 2 prices by 0.0129% (both water service and water usage prices). This change amounts to approximately 2 cents in the service fee and approximately 0.03 cents in the water usage tariff in 2013-14.

The current Water Tariff Groups are:

- Group 1: Portland, Heywood and Port Fairy
- Group 2: Allansford, Noorat/Glenormiston, Camperdown, Cobden, Koroit, Lismore/Derrinallum, Mortlake, North Otway Pipeline, Purnim, Simpson, Terang and Warrnambool
- Group 3: Balmoral, Caramut, Cavendish, Dunkeld, Glenthompson, Hamilton, Penshurst and Tarrington
- Group 4: Peterborough, Port Campbell, and Timboon
- Group 5: Dartmoor, Casterton, Coleraine, Macarthur, Merino and Sandford

For Water Plan 3 the Water Tariff Groups are:

- Group A: Allansford, Noorat/Glenormiston, Camperdown, Cobden, Heywood, Koroit, Lismore/Derrinallum, Mortlake, North Otway Pipeline, Port Fairy, Portland, Purnim, Simpson, Terang and Warrnambool
- Group B: Balmoral, Caramut, Cavendish, Dunkeld, Glenthompson, Hamilton, Penshurst and Tarrington
- Group C: Peterborough, Port Campbell and Timboon
- Group D: Dartmoor, Casterton, Coleraine, Macarthur, Merino and Sandford
- Group E: Darlington

8.1.4 REDUCTION IN TARIFF GROUPS – SEWERAGE

The sewerage service charges for Sewerage Tariff Groups 1, 2 and 5 are very similar in 2012-13. Therefore, it was feasible to merge these three sewerage tariff groups to form a new Sewerage Tariff Group A. This was achieved by:

- Sewerage Group 1 prices increase by 0.3743% (\$2.72) per year
- Sewerage Group 2 prices reduce by 0.0843% (\$0.61) per year
- Sewerage Group 5 prices increase by 0.2734% (\$1.99) per year

However, this was prior to the allocation of the 1% revenue reduction in 2013-14 which resulted in a net reduction in sewerage service charges for the new Sewerage Tariff Group A.

The current Sewerage Tariff Groups are:

- Group 1: Allansford, Koroit, Mortlake, Peterborough, and Timboon.
- Group 2: Camperdown, Cobden, Noorat/Glenormiston, North Otway Pipeline, Purnim, Simpson, Terang and Warrnambool.
- Group 3: Casterton, Coleraine and Hamilton.
- Group 4: Heywood and Portland
- Group 5: Dunkeld, Port Campbell and Port Fairy

For Water Plan 3, the Sewerage Tariff Groups are:

- Group A: Allansford, Camperdown, Cobden, Dunkeld, Koroit, Mortlake, Noorat/Glenormiston, North Otway Pipeline, Peterborough, Port Campbell, Port Fairy, Purnim, Timboon and Warrnambool.
- Group B: Casterton, Coleraine and Hamilton.
- Group C: Heywood and Portland

8.1.5 TRANSITION PLAN – WATER AND SEWERAGE TARIFFS

A transition plan is not required as the creation of Water Tariff Group A resulted in very minor price changes. Similarly, forming Sewerage Tariff Group A also resulted in very insignificant price changes. For water, the effect of the change is a few cents per year and in the case of sewerage amounts to no more than a couple of dollars per year.

In addition, the combined sewerage bill for the newly combined group will be reduced by 2% through the efficiency saving allocation. See Section 8.2 Allocation of 1% Efficiency Saving.

8.1.6 ELASTICITY OF DEMAND

Wannon Water is not changing the residential water tariff structures as far as the ratio of the fixed water service charge to water usage charge and there will be no real increase in

the total bill. Consequently, no impact is forecast on customer usage due to elasticity of demand.

8.2 ALLOCATION OF EFFICIENCY SAVINGS IN 2013-14

8.2.1 BACKGROUND

Wannon Water elected in the 2012-13 year to not take up the whole amount of the authorised price determination increase for its water and sewerage prices as the revenue to be raised was in excess of the revenue required to conduct the business of Wannon Water. A 1% price reduction was applied to all water and sewerage tariffs. In addition to providing relief to customers in 2012-13, this action also had the effect of lowering the price starting point for 2013-14 tariffs.

Wannon Water has elected to further reduce the gross revenue derived from water and sewerage tariffs in 2013-14 by 1%. Consistent with Wannon Water's intention to progressively phase in postage stamp pricing across its service region over Water Plans 3, 4 and 5 the proposed reduction in the revenue raised in 2013-14 presents an opportunity to further this process by allocating the reduction to specific tariff groups.

8.2.2 ALLOCATION OF EFFICIENCY SAVING TO WATER AND SEWERAGE TARIFFS

The amount to be allocated was determined by estimating 1% of projected total tariff revenue, excluding trade waste charges, fire service charges and miscellaneous charges.

Changes in water demand, movements in CPI and growth have not been included in the calculation as the outcome is to be applied in real terms.

Based on the projected revenue of \$58.52M to be raised 2013-14, a 1% reduction in required revenue equates to \$0.59M.

Wannon Water has applied 58.5% of the efficiency saving to the Sewerage Tariff Group A prices as this group had the higher

sewerage tariff prices. The sewerage component of Wannon Water's business is the more profitable and hence has been allocated a greater reduction.

The balance of the allocation (41.5%) of the efficiency saving was applied to reducing the water service charges of Water Tariff Groups B and D as these are the water tariff groups with the higher charges.

The reduction was applied to reducing the water service charge component only to commence redressing the water service charges as a percentage of the total average bill.

8.2.3 REVENUE REDUCTION OUTCOMES - WATER CHARGES

Table 8-1 Movement in Average Annual Residential Customer Charges sets out the movement in the average annual residential customer Water charges in real terms.

Water Tariff Group	Pre-Efficiency Allocation Average Bill	Post Efficiency Allocation Average Bill	Reduction	Allocated Amount
Group A	\$408.97	\$408.97	0%	-
Group B	\$510.88	\$491.63	9.3%	\$172,938
Group C	\$420.34	\$420.34	0%	-
Group D	\$520.64	\$491.32	8.5%	\$70,648

Table 8-1 Movement in Average Annual Residential Customer Charges

The reduction applied to Groups B and D was designed to provide a similar sized bill based on the average consumption for both water tariff groups.

The water prices, however, are based on the ratio of water usage to total water charges. Group B is based on 70% and Group D is based on 50% water usage to total water charges. The 70% scenario has moved back to about 64% currently and it is not proposed to adjust the mix between fixed water service charges and usage prices to alter this ratio. It is anticipated that this ratio may improve with an increase in household water demand.

Groups C and D water tariffs for Water Plan 2 were based on 50% water usage to total water charges ratio and this has moved to about 35% and 33% respectively. The 8.5% reduction in the water service charge for Group D improves this ratio by 2%. Further improvement would only come from a radical movement in water service prices and usage prices in both Groups C and D, which is not contemplated in Water Plan 3.

8.2.4 REVENUE REDUCTION OUTCOMES – SEWERAGE CHARGES

Table 8-2 Movement in Average Annual Customer Sewerage Charges sets out the movement in the average annual residential customer sewerage service charges:

Sewer Tariff Group	Pre-Efficiency Allocation Average Bill	Post Efficiency Allocation Average Bill	Reduction	Allocated Amount
Group A	\$728.22	\$713.66	2%	\$342,074
Group B	\$705.54	\$705.54	0%	-
Group C	\$690.76	\$690.76	0%	-

8.3 FIRE SERVICE CHARGES

Fire Service Charges have been the cause of some considerable angst from customers during the Water Plan 2 regulatory period. This was due to the structural changes made when moving from the previous three authorities arrangements to a consistent approach across the Corporation's service area.

The 2012-13 fire service charges are shown in Table 8-3 2012-13 Fire Service Charges by Groups.

Fire Service Size	Group 1	Group 2	Group 3	Group 4	Group 5
20 mm	\$102.43	\$100.25	\$123.30	\$123.05	\$123.30
25 mm	\$152.49	\$149.25	\$183.57	\$183.19	\$183.57
32 mm	\$409.70	\$400.97	\$493.20	\$492.17	\$493.17
40 mm	\$717.05	\$701.77	\$863.18	\$861.39	\$863.14
50 mm	\$1,126.69	\$1,102.68	\$1,356.32	\$1,353.51	\$1,356.24
80 mm	\$1,638.88	\$1,603.96	\$1,972.89	\$1,968.80	\$1,972.78
100 mm	\$2,369.70	\$2,319.20	\$2,852.65	\$2,846.74	\$2,852.50
150 mm	\$3,310.11	\$3,239.57	\$3,984.71	\$3,976.46	\$3,984.50
> 150 mm	\$4,372.49	\$4,279.31	\$5,263.61	\$5,252.70	\$5,263.32

Group 1	Portland, Heywood and Port Fairy
Group 2	Allansford, Noorat/ Glenormiston, Camperdown, Carlisle, Carpendeit, Cobden Koroit, Lismore/ Derrinallum, Mortlake, Purnim, Simpson, Terang and Warrnambool
Group 3	Balmoral, Caramut, Cavendish, Dunkeld, Glenhompson, Hamilton, Penshurst and Tarrington
Group 4	Peterborough, Port Campbell and Timboon
Group 5	Dartmoor; Casterton, Coleraine, Macarthur, Merino and Sandford

Table 8-3 2012-13 Fire Service Charges by Groups

Water Plan 3 Fire Service Charges are shown in Table 8-4 Fire Service Charges.

Size	Number of Services	Price
<=25 mm	15	\$120
32 mm	11	\$350
40 mm	24	\$600
50 mm	94	\$750
80 mm	188	\$1400
100 mm	133	\$2300
150 mm	26	\$3230
>150 mm	1	\$4270

Table 8-4 Fire Service Charges

A common set of Fire Service Charges based on size of connection will apply across all water systems in Wannon Water's service area in the Water Plan 3 regulatory period. All current fire service customers will receive a price reduction compared to current Water Plan 2 prices. Consequently a transitional arrangement is not required for these customers.

8.4 MAJOR TRADE WASTE CHARGES

8.4.1 MAJOR TRADE WASTE CHARGES

The Warrnambool Water Reclamation Plant receives trade waste from three major customers:

- Warrnambool Cheese and Butter
- Warrnambool Council Saleyards, and
- Midfield Meats

At Camperdown and Port Fairy dedicated industrial water reclamation plants receive trade waste via agreement and consequently are not regulated trade waste prices.

Wannon Water's existing trade waste charging arrangements were developed for the determination period 2008-13, and were based on 100% volumetric and load based charges.

8.4.2 PROBLEM WITH MAJOR TRADE WASTE PRICING WATER PLAN 2

Major trade waste charges in the Water Plan 2 regulatory period were 100% volumetric and load based charges.

The focus on trade waste volume and quality were designed to be cost reflective. However as these charges were solely comprised of a variable charge for each element, perverse outcomes are possible as the charges sent signals to promote un-economic pre-treatment.

The second issue was the original calculation of trade waste prices did not take into account Wannon Water's overheads as a component of the cost. If these overheads were included in the calculation of the prices, major trade waste charges would need to be increased by 55%.

8.4.3 MAJOR TRADE WASTE CHARGES WATER PLAN 3

To address these problems Wannon Water has developed a two part major trade waste charge structure for the Water Plan 3 regulatory period utilising long run marginal cost principles. Variable charges were derived for the four cost drivers based on long run marginal costs and the balance of the fixed trade waste fee derived in accordance with accepted economic theory to ensure that the revenue requirement is met.

An outcome of this process was a significant increase in major trade waste charge prices (due to the inclusion of overheads) which Wannon Water has elected to phase in over several water plans by limiting the increase in the Trade Waste Service Fee, Trade Waste Volume Charge and Trade Waste Quality charges in Water Plan 3 to 2% real per year.

The pricing principles for major trade waste customers within the sewerage system are to:

- Set the volume and quality charges at the long run marginal cost
- Set the service charge to ensure that the revenue requirement is met
- Increase the charges by CPI plus 2%

The 2012-13 and 2013-14 charges (before the application of CPI) are shown in Table 8-5 Major Trade Waste Charges.

Refer Appendix J for the Major Trade Waste Service Charge pricing principles.

Major Trade Waste Customers	Type of Charge	Group 2012-13	Group 2013-14
Service Charge (\$)	Pricing Principles	Not Applicable	Refer below
Volume Charge (\$/kL)	Regulated Charge	0.5821	0.4723
Quality Charges:			
BOD (\$/kg) Regulated Charge	Regulated Charge	1.5942	1.0850
SS (\$/kg) Regulated Charge	Regulated Charge	0.2596	0.1972
Ammonia (\$/kg)	Regulated Charge	1.5171	1.1365

Table 8-5 Major Trade Waste Charges

The Service Charge was set based on the customer's share of the total revenue requirement minus the total revenue associated with major trade waste regulated charges (volume and quality charges).

8.4.4 MAJOR TRADE WASTE PRICING – TRANSITIONAL ARRANGEMENTS

No major trade waste customer will pay any more than would have been paid under the previous (Water Plan 2) 100% volumetric/load based trade waste charges except for the annual 2% real increase in charges in each year of the Water Plan 3 regulatory period. Consequently a transition plan is not

required. Wannon Water has consulted with its major trade waste customers regarding Water Plan 3 major trade waste charges and the pricing model has been shared with them.



8.4.5 OTHER LOCATIONS - TRADE WASTE VOLUME AND LOAD CHARGES

Wannon Water presently does not have major trade waste customers in the other major centres, i.e. Portland, Hamilton, Camperdown, Port Fairy etc. Whilst there are emitters of non-house waste in these centres, their waste is received by agreement and hence outside the scope of this regulated

charge. Wannon Water will enter into appropriate agreements for acceptable waste with customers as the need arises. A trade waste agreement will be developed on a case by case basis and will detail charges depending on the nature of the waste to be discharged.

8.5 MINOR TRADE WASTE CHARGES

8.5.1 MINOR TRADE WASTE BACKGROUND

An anomaly has been identified in the Water Plan 2 Minor Trade Waste Charges in that Warrnambool based minor trade waste customers were paying significantly less than minor trade waste customers at other locations. This came about as Warrnambool minor trade waste customers were paying a volume charge based on the major trade waste volume charge which was volume based only and did not include quality charges. As Wannon Water had no regulated major trade waste charges in other locations the calculated minor trade waste charge for those locations included both trade waste volume and quality cost inputs.

A further distinction in the interest of equity has been made between those minor trade waste customers who require onsite pre-treatment equipment inspections and those that do not require any form of onsite pre-treatment of trade waste.

For Water Plan 3 for those customers on a "Deemed" Trade Waste Agreement, the Minor Trade Waste Service Fee has

been reduced by 50%. Customers on a "Deemed" Trade Waste Agreement are generally not required to have any pre-treatment of their trade waste.

The reduction in revenue has been offset by reducing the threshold for when the minor trade waste volume charge is levied. With the diminishing average water usage, the average trade waste discharge has also reduced. The reduction in the volume threshold generates a more equitable result, sharing the load across customers without altering Wannon Water's revenue.

These issues have been addressed in the amendments to the minor trade waste pricing structure and were outlined in Wannon Water's Water Plan 3 Discussion Paper for Small Business and Non-Residential Customers. Customers' feedback on the proposed changes has been positive.

8.5.2 MINOR TRADE WASTE SERVICE FEE (MINOR TRADE WASTE AGREEMENT)

The Minor Trade Waste Service Fee (previously referred to as the "Common Trade Waste Fee" in Water Plan 2) will continue for those minor trade waste customers required to enter into

a Minor Trade Waste Agreement. This is generally required where the customer is required to install onsite trade waste pre-treatment equipment.

8.5.3 MINOR TRADE WASTE SERVICE FEE (PRE-TREATMENT NOT REQUIRED)

A new Minor Trade Waste Service Fee has been introduced for those minor trade waste customers entering into a "Deemed" Trade Waste Agreement. Customers on a "Deemed" Trade Waste Agreement are generally not required to have any pre-treatment of their trade waste. This fee will be set at 50% of the Minor Trade Waste Service Fee. This will be a significant reduction for these customers and is seen as reasonable as

Wannon Water does not incur ongoing costs associated with Minor Trade Waste Agreements including inspecting and monitoring of the pre-treatment equipment where it is installed. Further Wannon Water will have deemed minor trade waste agreements with these customers which further reduces administrative costs to Wannon Water.

8.5.4 MINOR TRADE WASTE VOLUME CHARGE

The Minor Trade Waste Volume Charge in the Water Plan 2 regulatory period was only applied where the discharge of trade waste exceeded 750kL per year (2.0548 kLs per day).

For Water Plan 3 this volume threshold has been reduced to 520kL per year (1.4247 kLs per day). This reduction is in line with the average overall reduction in sewerage discharges and maintains a level of equity. This change will mean a further 109 customers will be billed for minor trade waste volume charges which will balance out the loss of revenue from introducing the Minor Trade Waste Service Fee ("Deemed" Trade Waste Agreement).

The Sewerage Volume Fee is calculated after taking into account the Trade Waste Volume Discharge factors – See **Appendix K – Trade Waste Volume Discharge Factors.**

As noted earlier, the price for Group 1 minor trade waste customers was charged a low Minor Trade Waste Volume Fee in 2012-13 compared to other groups as shown in Table 8-6 Current Minor Trade Waste Charges.

	Group 1 (kL)	Group 2 (kL)	Group 3 (kL)	Group 4 (kL)	Group 5 (kL)
2011-12	\$0.5613	\$1.2082	\$1.1892	\$2.1457	\$1.7988
2012-13	\$0.5821	\$1.2371	\$1.4810	\$2.2320	\$1.8474
2013-14	\$0.6101	\$1.2965	\$1.5522	\$2.3392	\$1.9362

Table 8-6 Current Minor Trade Waste Charges

It can be seen that the price difference between Group 1 is between 26% and 47% of other group prices. If Group 1 minor trade waste volume charge were on the same basis as the other four groups then this charge would be about \$1.22 per kL.

To address this anomaly Wannon Water will apply the following price adjustments as per Table 8-7 Minor Trade Waste Adjustments.

Group	Adjustment
Group 1: Warrnambool, Allansford and Koroit	12% real plus CPI adjustment per year
Group 2: Hamilton	CPI adjustment only per year
Group 3: Portland	CPI adjustment only per year
Group 4: Port Fairy	3% real REDUCTION per year and no CPI adjustment
Group 5: Camperdown, Casterton, Cobden, Coleraine, Dunkeld, Heywood, Mortlake, Peterborough, Port Campbell, Simpson, Terang and Timboon	Zero real increase and no CPI adjustment per year

Table 8-7 Minor Trade Waste Adjustments

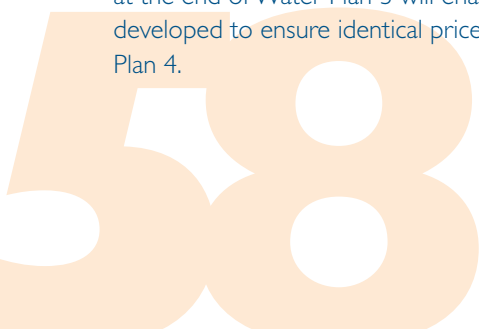
Over time the following prices per kL of minor trade waste in nominal terms will eventuate as per Table 8-8 Minor Trade Waste Charges.

Group	2012-13 (kL)	2013-14 (kL)	2014-15 (kL)	2015-16 (kL)	2016-17 (kL)	2017-18 (kL)
Group 1	\$0.58	\$0.67	\$0.77	\$0.89	\$1.02	\$1.17
Group 2	\$1.24	\$1.27	\$1.31	\$1.34	\$1.38	\$1.47
Group 3	\$1.48	\$1.52	\$1.56	\$1.61	\$1.65	\$1.70
Group 4	\$2.15	\$2.09	\$2.02	\$1.96	\$1.90	\$1.84
Group 5	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80

Table 8-8 Minor Trade Waste Charges

The above table assume CPI of 2.5% per year. A further review at the end of Water Plan 3 will enable another glide path to be developed to ensure identical prices at the conclusion of Water Plan 4.

(It should be noted that minor trade waste group members are different to water and sewerage tariff groupings.)



8.5.5 MINOR TRADE WASTE – TRANSITION CONSIDERATION – GROUP I

The Group I transitional programme is a glide path of 12% real increase plus CPI for the five years of the next regulation period.

The transitional impact for Minor Trade Waste Group I customers in dollar terms is not significant. This increase in conjunction with a 2% real reduction in sewerage prices plus CPI only increases in water and sewerage tariffs and a reduction in the fire service charges (if applicable) means that it is unlikely that there will be price shock for any minor trade waste customers.

The estimated increase for the midpoint minor trade waste volume customer is \$56 per year or approximately \$14 per

quarter. However, this increase is nearly wholly offset by the reduction in sewerage and fire service tariffs. A customer with water, sewerage, a small fire service and a minor trade waste volume charge in 2012-13 would pay \$4,001.90 and in 2013-14 in real terms would pay \$4,002.52 which is a 0.02% increase and insignificant.

There is a cost to Wannon Water to implement this change in minor trade waste volume charges of about \$50,000 over the Water Plan 3 regulatory period.

8.5.6 SEWAGE VOLUME CHARGE

This is the new title for an existing charge for those non-residential customers discharging more than 520kL per year (1.4247kLs per day calculated on a quarterly basis) of sewage (in Water Plan 2 they were charged the Minor Trade Waste Volume charge).

The Sewerage Volume Fee is calculated after taking into account the Trade Waste Volume Discharge factors – See **Appendix K – Trade Waste Volume Discharge Factors.**

The price to be charged will be identical to the Minor Trade Waste Volume Charge but is listed separately to ensure that those customers discharging large amounts of sewage to the system, but are not deemed or agreed minor trade waste customers, make appropriate contributions to the upkeep of the system that supports them.

8.6 URBAN NON-RESIDENTIAL AND RURAL WATER USAGE CHARGES

Groups 1 and 2 will merge to form a new Group A on the same basis as the Urban Water Tariff Group A. The remaining groups 3, 4, and 5 will become Groups B, C, and D respectively and align with the respective urban residential and non-residential water tariff groups.

Pricing of potable water will be equivalent to the Tier 2 Usage for residential customers in the relevant water tariff group.

Pricing of non-potable water will remain calculated at 83.30% of the potable water usage charges.

All potable and non-potable water charges per kL for rural and non-domestic customers will only increase by CPI over the Water Plan 3 regulatory period.

8.7 RURAL WATER USAGE SURCHARGE

The Rural Water Usage Surcharge (formerly known as Rural Water Leasing Surcharge) applies in addition to the urban non-residential and Rural Water Usage Charge when a rural customer exceeds the previously agreed water allowance for water supplied to the property.

This charge will only increase by CPI year on year for the Water Plan 3 regulatory period.

8.8 UNCONNECTED SERVICE CHARGE - WATER

The former Groups 1 and 2 will merge to form a new Group A. Groups 3, 4, and 5 will become Groups B, C and D respectively.

The unconnected water service charges will continue to mirror the relevant 20mm connected group service charges and will only increase at CPI over the Water Plan 3 regulatory period.

8.9 UNCONNECTED SERVICE CHARGE - SEWERAGE

As for other Sewerage Tariffs Groups, the Sewerage Tariff Groups for unconnected properties Service Groups 1, 2 and 5 will merge to form the new Group A.

The existing Groups 3 and 4 will be renamed Group B and C respectively.

Prices for Sewerage Tariffs Unconnected Service will continue to be set at 30% of the appropriate group Sewerage Tariff Connected service. These prices will only increase by CPI year on year for the Water Plan 3 regulatory period.

8.10 RECYCLED WATER PRICING

Wannon Water is not expecting any significant increase demand for its recycled water products during Water Plan 3. Refer Section 7. Consequently, Wannon Water will continue to abide by the Schedule 4 Pricing principles 4.1 Recycled water pricing principles at page 27 of the Essential Services Commission 2008, *2008 Water Price Review Final Decision: Wannon Water Determination, June*.

Wannon Water's application of these principles is espoused in **Appendix H – Recycled Water Pricing Principles**.

8.11 CUSTOMER CONTRIBUTIONS

Wannon Water has based its financial modelling on anticipated growth and the existing New Customer Contribution pricing structure in accordance with the Commission's advised requirements.

Wannon Water has developed a draft negotiating framework (**Appendix I**) in accordance with the principles espoused in Section 3.6 of the Commission's *New Customer Contributions Staff Framework and Approach* paper, May 2012.

Wannon Water has opened discussions (10 August 2012) with local developers by conducting a meeting and, amongst other matters, explained the proposed pricing principles for the future imposition of New Customer Contributions. As these meetings are monthly, Wannon Water will consult with local developers as Wannon Water's approach is crystallised.

Wannon Water will submit a formal response to the Commission by the 7 December 2012 in accordance with the advised requirements.

8.12 MISCELLANEOUS CHARGES

In the Water Plan 2 regulatory period Wannon Water had 97 miscellaneous charges of which 29 are regulated by the Commission. The regulated miscellaneous charges (including new customer contributions) raise approximately \$1.16M (65.0%) of the total of projected miscellaneous revenue of \$1.79M to be raised in 2013-14.

Wannon Water has undertaken an extensive review of all Miscellaneous Charges and recalculated all charges from first principles. This process identified some anomalies as some charges were over recovering costs whilst others under recovered costs.

For Water Plan 3 Wannon Water will:

- Reduce Information Statement charge from \$102 to \$67, (Revenue reduction \$0.12M per year)

- Increase Special Meter Reading Fees from \$21 to \$40 to recover the actual cost (Revenue increase \$0.05M per year)
- Introduce a New Offer of Conditions Fee to recover the cost of an additional resource within the Development Services Area to process development applications (revenue increase \$0.09M per year which is offset by a similar increase in costs)

There are a number of other minor corrective adjustments that amount to a total reduction in revenue of approximately \$0.03M per year.

Miscellaneous Charges are listed in **Appendix G**.



9 NON-PRESCRIBED SERVICES

9.1 CLASSIFICATION OF SERVICES AS NON-PRESCRIBED

Non-prescribed activities comprise of:

- Brine receipt
- Property lease income
- Recovery of plant specific operating costs

9.2 REVENUE AND EXPENDITURE ASSOCIATED WITH NON-PRESCRIBED SERVICES

Brine revenue is generated at Warrnambool from the acceptance of brine transported by vehicle from the Hamilton Mineral Separation Plant and the Mortlake Power Station.

Property Lease revenue is received from various parties who lease land largely for grazing purposes and from various organisations who lease sites for communication devices.

Revenue from the recovery of treatment plant specific operating costs is generated from GlaxoSmithKline, Origin Energy Ltd. Wannon Water operates specific infrastructure assets for these organisations and is reimbursed for these costs.

9.3 IMPACT OF NON-PRESCRIBED SERVICES

Table 9-1 Impact of Non-Prescribed Services illustrates proposed non-prescribed revenue and expenditure over the regulatory period:

Non Prescribed Services	2013-14 (kL)	2014-15 (kL)	2015-16 (kL)	2016-17 (kL)	2017-18 (kL)
Revenue	4.61	4.86	5.10	5.52	5.44
Operating expenditure	3.18	3.16	3.13	3.08	3.00

Table 9-1 Impact of Non-Prescribed Services



10 APPENDIX A – Service Standards – Water Plan 2

Customer Service Standard Performance	Target	2008-09	2009-10	2010-11	2011-12	2012-13
WATER						
Unplanned water supply interruptions (per 100km)	10	8.50	7.10	7.03	4.9	N/A
Average time taken to attend bursts and leaks (priority 1) (minutes)	35	19.8	11.9	16.7	17.3	N/A
Average time taken to attend bursts and leaks (priority 2) (minutes)	60	26.7	26.4	22.3	42.9	N/A
Average time taken to attend bursts and leaks (priority 3) (minutes)	240	81.10	94.00	90.66	59.7	N/A
Unplanned water supply interruptions restored within 5 hours (per cent)	97%	99.0%	99.2%	98.4%	97.8%	N/A
Unplanned rural water supply interruptions restored within 12 hours (per cent)	95%	100%	100%	100%	100%	N/A
Planned water supply interruptions restored within 5 hours (per cent)	90%	96%	100%	100%	92%	N/A
Average unplanned customer minutes off water supply (minutes)	9.9	5.50	2.53	3.21	2.6	N/A
Average planned customer minutes off water supply (minutes)	9.0	2.00	1.39	0.24	1.7	N/A
Average frequency of unplanned water supply interruptions (number)	0.09	0.070	0.051	0.044	0.029	N/A
Average frequency of planned water supply interruptions (number)	0.05	0.0200	0.0110	0.0022	0.009	N/A
Average duration of unplanned water supply interruptions (minutes)	108	78.4	49.0	72.8	89	N/A
Average duration of planned water supply interruptions (minutes)	180	105.8	114.5	112.8	196	N/A
Number of customers experiencing more than 5 unplanned water supply interruptions in the year (number)	0	0	0	0	0	N/A
Unaccounted for water (per cent)	12.0%	14.0%	14.4%	18.2%	16.4%	N/A
SEWERAGE						
Sewerage blockages (per 100km)	38.3	9.80	10.39	10.35	8.3	N/A
Average time to attend sewer spills and blockages (minutes)	30	21.80	20.50	20.50	95.7	N/A
Average time to rectify a sewer blockage (minutes)	90	97.40	73.17	80.07	163.4	N/A
Spills contained within 5 hours (per cent)	98%	100%	100%	100%	100%	N/A
Customers receiving more than 3 sewer blockages in the year (number)	0	0	0	0	0	N/A
CUSTOMER SERVICE						
Complaints to EWOV (per 1000)	0.60	1.19	1.05	1.13	0.95	N/A
Telephone calls answered in 30 seconds 1300 926 666 (%)	98.9%	98.9%	99.7%	99.6%	99.6	N/A

* N/A – not yet available

Table 10-1 Customer Service Standards

CUSTOMER SERVICE STANDARD PERFORMANCE

Generally, most indicators are showing steady improvement, or are at their maximum performance. Only two indicators are less than target, namely Unaccounted for Water and Complaints to Energy and Water Ombudsman (EWOV) Victoria.

Unaccounted for Water, also known as non-revenue water, volumetrically has risen slightly in major population centres. This is possibly due to better measuring and recording processes, rather than an increase in leakage, whilst actual billed consumption has decreased quite dramatically which has reduced the denominator and hence increased the quotient.

Investigative work continues to identify leakage sites and make the necessary repairs.

Complaints to Energy and Water Ombudsman Victoria (EWOV) exceeded target due to Wannon Water's proactive approach which includes placing EWOV's contact details on all customer bills. Monthly analysis of complaints referred to EWOV has not identified any systemic issues requiring specific attention by Wannon Water. There has also been a change in the definition of a "complaint", which has broadened and increased the number of contacts that are now reported to the Commission as complaints.

II APPENDIX B – Other Standards and Commentary – Water Plan 2

Other Standards	Target	2008-09	2009-10	2010-11	2011-12	2012-13
Percentage of Water Recycled	28%	21%	15.1%	6.9%	13%	N/A
Percentage of Biosolids reused	100%	100%	100%	100%	100%	N/A
Sewer backlog properties to be serviced	130 (West Portland)			130 (West Portland)		N/A
EPA discharge licence compliance	87%	98.6%	92.7%	88.5%	96%	N/A
Drinking Water Quality – Faecal Coliforms	98%	100%	100%	100%	100%	N/A
Drinking Water Quality – Turbidity	95%	100%	100%	100%	100.0%	N/A
Water flow rates – 20 mm	20 L/min	20 L/min	20 L/min	20 L/min	20 L/min	N/A
Water flow rates – 25 mm	35 L/min	35 L/min	35 L/min	35 L/min	35 L/min	N/A

* West Portland Sewer backlog was expected to be completed in 2010-11 but this was not achieved due to various delays including various appeals to VCAT. It is now expected to be completed in March 2013.

* N/A – not yet available

Table 11-1 Other Standards

Similarly the wet period also reduced the opportunities to reuse recycled water in 2009-10, and more particularly in 2010-11.

The EPA discharge licence compliance decline in performance is due primarily to two plants: the Port Fairy Industrial Water Reclamation Plant which, with the commencement of the Corporate Licence, acquired phosphorus and nitrogen performance limits for which the plant is not designed to

remove and consequently fails the requirement; and the Portland Water Reclamation Plant, which is under capacity.

Corrective action will be instigated upon the EPA's requirements being specified in respect to the Port Fairy Industrial Water Reclamation Plant. Costs associated with any rectification will be borne by the industrial user.

Portland Water Reclamation Plant is currently being upgraded and is due for completion in June 2013.

Greenhouse Gas Emissions	2008-09	2009-10	2010-11	2011-12	2012-13
Target	38,461	37,661	36,861	36,061	35,261
Actuals	39,052	30,734	28,578	33,753	N/A
Variance	(-591)	6,927	8,283	2,308	N/A

Table 11-2 Greenhouse Gas Emissions

Reduction in Greenhouse Emissions in 2009-10 was impacted by the wet year, which meant a significant reduction in water pumped from the Otway's to Warrnambool and a corresponding reduction in electricity use.



12 APPENDIX C – Historic Demand – Water Plan 2

The 2008-13 Water Plan pricing structure was based on a planned collection of 70% water tariff revenue from the volumetric component of the tariff and 30% from the water fixed fee for the majority of Wannon Water's residential customers.

With the decline in residential water sales the volumetric component of the average residential household water bill

decreased to 61.2% in 2010-11. In some communities, which are considered holiday towns or where the community preferred to utilise tank water for historical reasons, prices were structured to deliver 50% of their tariff on a volumetric basis and 50% on their water fixed service fee.

	Residential Water Volume	Residential Service Fees	Percentage Income Water Volume Sales
2008-09	\$7,179,809	\$4,103,516	63.6%
2009-10	\$7,129,412	\$3,929,672	64.5%
2010-11	\$7,003,500	\$4,435,601	61.2%

Table 12-1 Change in percentage tariff source per household for those on a planned 70:30 split

	Residential Water Volume	Residential Service Fees	Percentage Income Water Volume Sales
2008-09	\$472,020	\$654,367	41.9%
2009-10	\$462,713	\$727,717	38.9%
2010-11	\$384,938	\$804,104	32.4%

Table 12-2 Change in percentage tariff source per household for those on a planned 50:50 split

The average consumption decline per household across all residential customers is reflected in Table 12-3.

Year	kL	Connections	Average kL
2006-07	5,907,324	32,438	182
2007-08	5,471,083	32,893	166
2008-09	5,461,524	33,394	164
2009-10	5,196,750	33,953	153
2010-11	4,656,896	34,515	135

Table 12-3 Decline in consumption per household over time



13 APPENDIX D – Inclining Block Tariff Collection Outcomes – Water Plan 2

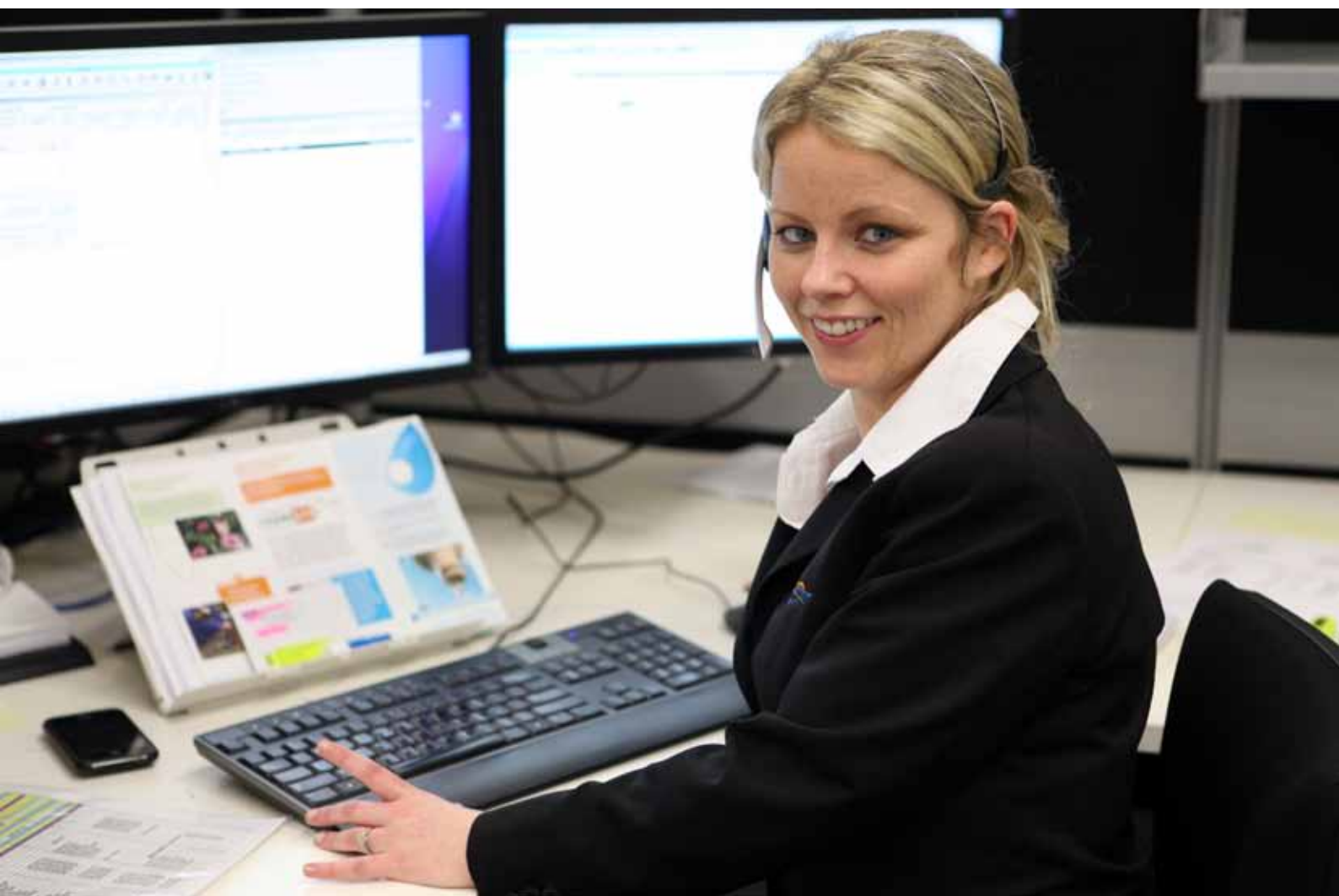
Table 13-1 shows the percentage of income that was earned from each tier for each tariff group. As volumes consumed decreased over the three years a greater proportion of

revenue is derived from the first tier and less from the middle and third tiers.

	2008-09				2009-10				2010-11			
	1st	2nd	3rd	kL Per Prop	1st	2nd	3rd	kL Per Prop	1st	2nd	3rd	kL Per Prop
Group 1	67%	20%	13%	166	70%	19%	10%	151	77%	17%	6%	133
Group 2	68%	20%	12%	172	71%	19%	10%	160	76%	18%	7%	143
Group 3	72%	18%	10%	146	72%	18%	10%	143	77%	16%	7%	126
Group 4	67%	16%	17%	121	72%	15%	13%	111	79%	14%	8%	96
Group 5	61%	19%	20%	151	64%	19%	17%	139	75%	15%	10%	103
All	68%	20%	12%	164	71%	19%	10%	153	76%	17%	7%	135

Group 1	Portland , Heywood and Port Fairy
Group 2	Allansford, Noorat/Glenormiston, Camperdown, Cobden, Koroit, Lismore/Derrinallum, Mortlake, North Otway Pipeline, Purnim, Simpson, Terang and Warrnambool
Group 3	Balmoral, Caramut, Cavendish, Dunkeld, Glenthompson, Hamilton, Penshurst and Tarrington
Group 4	Peterborough, Port Campbell and Timboon
Group 5	Dartmoor, Casterton, Coleraine, Macarthur, Merino and Sandford

Table 13-1 Inclining Block Tariff Collection Outcomes - Water Plan 2



14.1.2 ALUMINUM COMPLIANCE

The source of supply to Cavendish regularly has naturally occurring aluminium above the limit 0.2 mg/L acid soluble limit specified in Schedule 2 of the Safe Drinking Water Regulations.

The aluminium limit in the regulations was included at 0.2 mg/L as a surrogate for filter performance where aluminium sulphate is used as a coagulant. The Cavendish Water Treatment Plant does not have filters and does not use aluminium sulphate to aid the treatment process. The 0.2 mg/L limit is also the aesthetic limit for aluminium where levels beyond this limit may cause dirty water in the water reticulation system, however there is no history of dirty water complaints in Cavendish caused by the natural aluminium.

There is no ADWG health limit for aluminium.

Wannon Water has consulted with the Cavendish community and has the support of the community to apply to the Minister of Health to exclude aluminium as a Schedule 2 health related parameter for water supplied to Cavendish. This application has been submitted and Wannon Water is awaiting a formal approval. There is no proposed expenditure within Water Plan 3 to remove the natural occurring aluminium from the water supply at Cavendish.

14.2 WATER TREATMENT PLANT RENEWAL EXPENDITURE

More significant renewal based expenditure at water treatment plants to ensure ongoing water quality compliance is shown in Table 14-1 Water Treatment Plant Process Renewal Expenditure.

Project Name	Year	Estimate
Corporation wide: Replacement program for all dosing pumps	2013-18	\$317,581
Corporation wide: Replace lab equipment	2013-18	\$254,065
Corporation wide: Install new online equipment	2013-18	\$254,065
Corporation wide: Maintain all uninterruptible power supplies	2013-18	\$158,791
Corporation wide: Standard draw down tubes for all plants	2013-18	\$31,758
Corporation wide: Fit dosing points to all critical supplies	2013-16	\$76,220
Balmoral WTP Renewals 2014-2018	2016-18	\$20,325
Balmoral WTP Replace chemical dosing pumps	2016-17	\$60,976
Balmoral WTP Refurbish poly unit with smaller unit	2013-14	\$34,299
Camperdown WTP Chemical dosing upgrades	2013-14	\$114,329
Casterton WTP Renewals 2014-2018	2013-18	\$120,935
Casterton WTP Replace chemical dosing pumps	2017-18	\$31,758
Cobden WTP Renewals 2014-2018	2013-18	\$240,346
Cobden WTP Upgrade chemical dosing equipment	2013-14 & 2017-18	\$84,146
Cavendish WTP Replace raw water pumps, chemical pumps, chemical storage	2014-16	\$133,384
Hamilton WTP Renewals 2014-2018	2013-18	\$254,065
Hamilton WTP Replace inline mixer	2015-16	\$19,055
Hamilton WTP Replace chemical flow meter	2016-17	\$17,785
Macarthur WTP Replace GFO media every 3 years	2013-14, 2015-16 & 2017-18	\$381,098
Macarthur WTP Replace all dosing pumps with new duty standby	2014-15	\$36,839
Mortlake WTP Refurbish chlorine system	2016-17	\$44,461
Port Campbell WTP Replace media in all filters	2014-15	\$63,516
Port Campbell WTP Replace pumps	2013-15 & 2017-18	\$50,813
Port Campbell WTP Replace air compressors and dryers	2017-18	\$38,110
Port Fairy WTP Renewals 2014-2018	2013-18	\$33,283
Port Fairy WTP Refurbish chlorine dosing, move gas to shed	2013-14	\$317,561
Bald Hill WTP Upgrade cooling towers	2014-16	\$158,791
Bald Hill WTP Equipment upgrade	2013-14	\$57,166
Terang WTP Refurbish chemical dosing systems	2013-15	\$363,313
Warmambool WTP Replace switchboard and relocate wet areas	2015-16	\$673,272
Warmambool WTP Replace alum dosing equipment	2017-18	\$31,758
	Total	\$4,473,864

Table 14-1 Water Treatment Plant Process Renewal Expenditure

14.3 BLUE GREEN ALGAE RISK

A particular risk to water quality is blue green algae toxins that result from blue green algae outbreak events that occur in raw water storages. Wannon Water has a system to manage such outbreaks however additional management tools would reduce risk.

Activated carbon adsorbs algae toxins from water and Wannon Water intends to incorporate Granular Activated Carbon

into its existing filters or dose Powered Activated Carbon at the following water treatment plants to improve flexibility of operations during blue green algae events whilst still complying with the Safe Drinking Water Regulations 2005.

Projects in Water Plan 3 are shown in Table 14-2 Blue Green Algae Management Expenditure.

Project	Year	Expenditure
Camperdown WTP GAC Media	2013-14	\$101,626
Cobden WTP GAC Media	2013-14	\$127,033
Simpson WTP GAC Media	2013-14	\$50,813
Terang WTP GAC Media	2015-16	\$63,516
Total		\$342,988

Table 14-2 Blue Green Algae Management Expenditure

A new bore known as the Curdievale Bore will be constructed at a cost of \$2.99M in year 1 which will mitigate the risk to supply water to Warrnambool, Allansford and Koroit in the event of a blue green algae event and/or any other water quality event from water sourced from the Gellibrand River at the South Otway off-take or Plantation Road Reservoir. This bore will also enable Wannon Water to utilise its existing

unused 2,000ML groundwater licence entitlement.

A proposed pipeline and tank bypass around Plantation Road Reservoir (\$904,575) in years 4 and 5 will also provide flexibility should the Plantation Road Reservoir experience a blue green algae or other water quality or dam safety event.

14.4 WATER TREATMENT PLANT RISK MITIGATION

Wannon Water's water treatment processes are generally robust and Wannon Water has high confidence in supplying compliant water. However further works are required at the following plants.

14.4.1 CASTERTON WATER TREATMENT PLANT

The Casterton Water Treatment Plant supplies water to Casterton, Coleraine, Merino and Sandford and is a direct filtration plant which does not have a clarification process prior to the filters.

Operation of the plant to meet performance standards is marginal and it is proposed to construct a clarifier to ensure ongoing compliance.

The clarifier for the Casterton water treatment plant is planned to be constructed years 2 and 3 of Water Plan 3 at an estimated cost of \$3.19M.

14.4.2 HEYWOOD WATER TREATMENT PLANT

The Heywood Water Treatment Plant has experienced water quality issues with hardness, iron and manganese. Whilst these issues have been intermittent, and pose an aesthetic issue rather than a health risk, Wannon Water will invest approximately \$447,155 in years 1 and 2 of Water Plan 3 to upgrade the plant.

It is proposed to replace the existing cooling tower, refurbish the water softening system, upgrade the chemical dosing systems and investigate options for iron and manganese oxidation.



14.4.3 HAMILTON WATER TREATMENT PLANT

Wannon Water upgraded the Hamilton Water Treatment Plant and upstream storages in the Water Plan 2 regulatory period to ensure that the Hamilton Water Treatment Plant consistently meets regulatory requirements, particularly in relation to aluminium.

Following this upgrade the plant has complied with the aluminium limits. However, since then the plant has not been subject to the wide variety of raw water quality variations which caused difficulty in the past.

The addition of a clarifier would ensure compliance under all raw water quality scenarios. While Wannon Water has not included the project in this Water Plan, it has included a new clarifier at a cost of \$4.08M in Water Plan 4 should the current plant demonstrate an inability to provide compliant water in the Water Plan 3 regulatory period.

14.5 TOTAL DISSOLVED SOLIDS (TDS)

The Department of Health requires that *“Where TDS of the drinking water is above 1,200 mg/L, remedial action should be taken during the regulatory period... Ideally, the TDS of supplied water should be below a TDS of 600 mg/L”*.

Wannon Water does not have any water supply system where the TDS is above 1,200 mg/L requiring the TDS to be lowered this regulatory period. Wannon Water has groundwater water supply systems where TDS is above 600 mg/L located at:

- Macarthur (980 mg/L)
- Port Fairy (833 mg/L)
- Portland (681 mg/L)
- Heywood (647 mg/L)
- Peshurst (640 mg/L)

TDS removal requires reverse osmosis treatment which is expensive to establish and has high operating costs due to it being a high energy process. Wannon Water has previously undertaken willingness-to-pay surveys at Macarthur and Port Fairy and both communities overwhelmingly demonstrated very low willingness-to-pay for a reduction in TDS.

Most customers that are sensitive to TDS have already got alternative drinking water supplies, whether that is rainwater tanks or under bench filtration units and therefore the vast majority are unwilling to pay for higher quality reticulated water. Wannon Water is not proposing any expenditure to reduce the TDS of water.

14.6 HEALTH (FLUORIDATION) ACT 1973

The Department of Health requires that Wannon Water include *“prudent and efficient expenditure relating to the operation of the fluoride facilities...”*. Wannon Water has included the operating costs of the fluoridation plants at Hamilton and Warrnambool in its operating expenditure for Water Plan 3.

Wannon Water has not received any direction under the *Health (Fluoridation) Act 1973* to fluoridate any additional water supplies.

14.7 PROPOSED CHANGES TO SAFE DRINKING WATER REGULATIONS

The *Safe Drinking Water Regulations 2005* sunset in 2015, which is midway through the Water Plan 3 regulatory period. The Department of Health has formally advised its intention to incorporate the health based parameters contained in the most recent version of the Australian Drinking Water Guidelines (ADWG) into the *Safe Drinking Water Regulations* from 2015.

These proposed changes will result in new turbidity limits for filters that treat surface water sources. Consequently Wannon Water assessed filter performance at the relevant water treatment plants and has identified the following projects required to ensure compliance with the most recent version of the ADWG. These are shown in Table 14-3 Filter Performance and Compliance Projects.

Project	Year	Expenditure
Warrnambool WTP UV	2016-18	\$1,797,428
Warrnambool WTP filter upgrade	2016-18	\$758,775
Simpson WTP UV plus filter upgrade	2016-18	\$326,626
Balmoral WTP UV	2016-18	\$237,073
Camperdown WTP Improve filter operations	2016-18	\$193,089
Cobden WTP Investigate DAF options	2014-15	\$50,813
Terang WTP Improve filter operations	2016-18	\$45,732
Total		\$3,409,537

Table 14-3 Filter Performance and Compliance Projects

Many of Wannon Water's water treatment plant filters were not designed to achieve the filtered water turbidity limits within the most current version of the ADWG and as a result to comply with the ADWG Wannon Water will have to:

- Upgrade the filters to optimise filter performance, and/or
- Install Ultra Violet (UV) disinfection to provide an additional water treatment barrier in case the filter performance does not meet the new requirements under the ADWG.

The Glenthompson Water Treatment Plant will be upgraded in 2012-13. This includes the filtration and disinfection systems needed for compliance with the proposed 2015 regulations.

All other water treatment plants with filters have groundwater as the source water and therefore will not be subject to the proposed turbidity limits.

14.8 UP-PROTECTED SURFACE WATER CATCHMENTS

The Department of Health advised Wannon Water that "where drinking water supplies are drawn from multi-use or unprotected surface water catchments, any risk arising from such sources are addressed, especially for drinking water supplies that traditionally have been disinfected without also being filtered".

Wannon Water has a Water Quality Risk Management Plan to address this risk.

In the Water Plan 2 regulatory period Wannon Water in partnership with the Corangamite Catchment Management Authority invested \$250,000 in improving water quality and reducing water quality risks in the Gellibrand River and tributaries. The total improvement program over the last three years includes:

- 26 river health projects covering 134 hectares
- Establishment of 67 hectares of riparian buffer strips
- Removal of willows along 93 km of the river
- Construction of four fish ways to reinstate fish movement between the estuary and the upper catchment

Wannon Water has two surface water treatment plants that do not include any filtration, being Purnim and Cavendish, both of which have been risk assessed.

Purnim's water supply originates from the Gellibrand River (unprotected) and Arkins Creek (protected) catchments and the Cavendish water supply originates from Grampians National Park (protected) catchment and groundwater.



14.8.1 PURNIM WATER QUALITY

As a result of a 2011 review of the water quality risk assessment at Purnim, Wannon Water proceeded to upgrade the Purnim Water Treatment Plant with the installation of an Ultra Violet (UV) disinfection system in mid-2012. Wannon

Water's view is that the combination of selective water harvesting, detention time within upstream storages and UV disinfection provides an adequate barrier to the risks associated with raw water being supplied from an unprotected catchment.

14.8.2 CAVENDISH WATER QUALITY

The risk assessment for the Cavendish water supply indicates that the status and management of the Grampians National Park catchment where the water is sourced represents a low risk water quality. Nevertheless, Wannon Water is currently

installing a UV disinfection system and other works to improve water quality and reduce water quality risks. The UV system has been installed and the other works will be complete later in 2012.

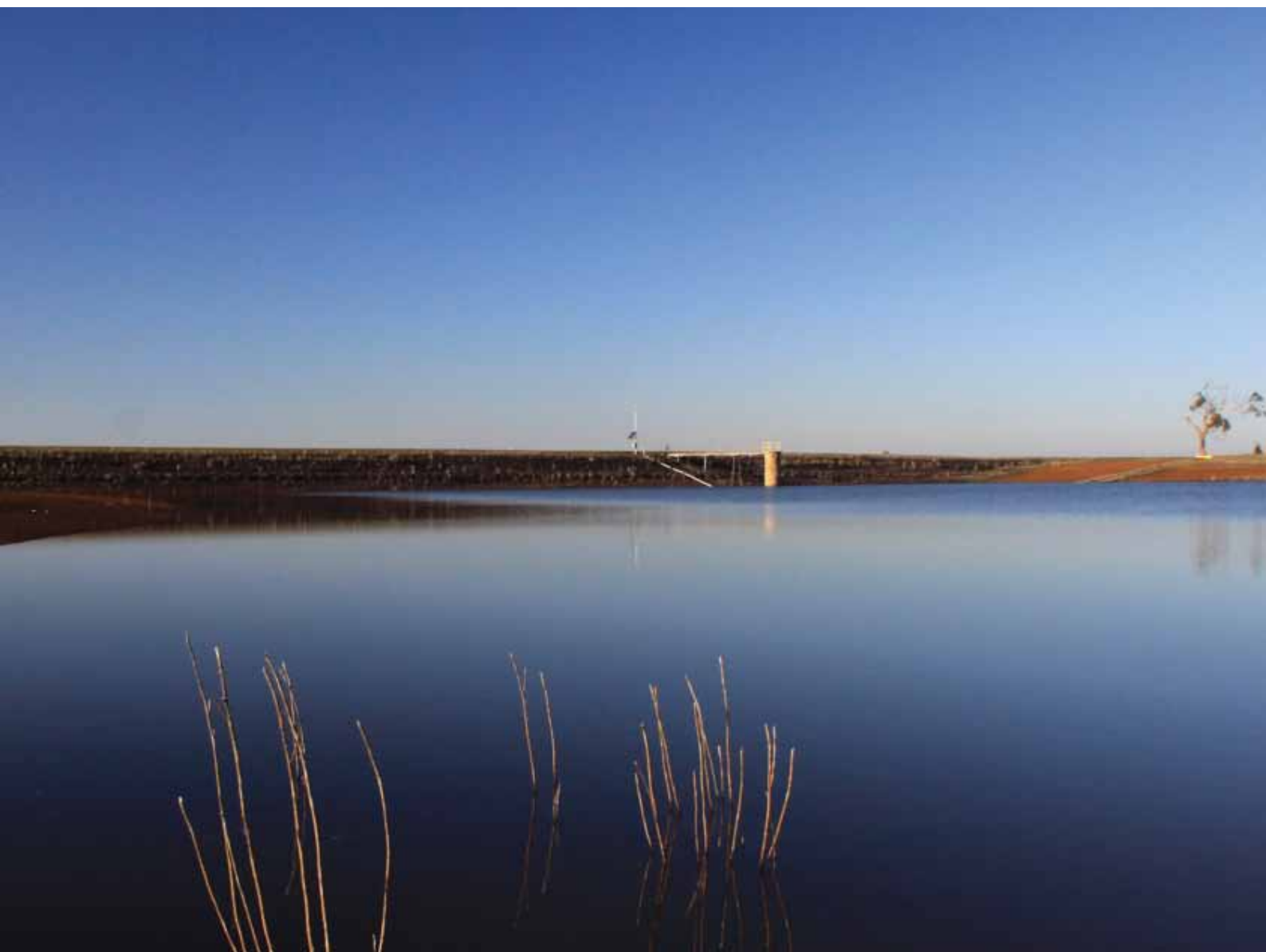
14.9 DEPARTMENT OF HEALTH'S FORMAL RESPONSE

The Department of Health's formal response to Wannon Water's proposed program of expenditure is attached.

The response to Wannon Water's proposed works was supportive but did raise the subject of *"discussions ... on research projects that could potentially be jointly undertaken in order to quantify any potential water-related health issues that may arise as a result of elevated levels of TDS in water supplies"*.

The Department was requested to clarify its comments, to which it verbally advised:

- The Department considers that there is a lack of focus in Victoria of TDS in potable drinking water
- Chief funding for projects will be through the Department
- All water corporations with relevant issues are being engaged
- No additional expenditure for the research is being requested in the Water Plan.





Department of Health

Incorporating: Health, Mental Health and Ageing

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08 AUG 2012

Our Ref: ADD/12/27305

Your Ref:

Mr Grant Green
Managing Director
Wannon Water
PO Box 1158
WARRNAMBOOL VIC 3280

Dear Mr Green

Thank you for the presentation that you and your senior staff gave to the Department of Health on Wannon Water's draft Water Plan 3 document on 20 June 2012. The department has considered the content of your presentation, and your draft Water Plan 3 document, and would like to offer the following feedback.

The department is supportive of the identified water quality improvement projects, discussed in your draft Water Plan 3 document and identified in your presentation, particularly the projects listed for the water supply systems servicing the townships of Purnim and Cavendish.

The department does have ongoing concern about the elevated levels of total dissolved solids that are feature of the water supply systems that service the townships of Macarthur, Heywood, Peshurst, Port Fairy and Portland. It is acknowledged that Wannon Water has conducted willingness to pay surveys with its customers and the current view of the majority of customers is that they are unwilling to pay for treatment processes that would significantly lower the saltiness of these water supplies.

Whilst respecting the views of customers, the department would like to have further discussions with Wannon Water on research projects that could potentially be jointly undertaken in order to quantify any potential water-related health issues that may arise as a result of elevated levels of total dissolved solids in drinking water supplies.



If you would like to discuss your Water Plan further with the department, please contact David Sheehan, Team Leader, Water Regulation, on 03 9096 5647.

Yours sincerely



Rodney Dedman
Manager Water

cc: Mr Andrew Chow, Director Regulation, Essential Services Commission
Mr Peter Betson, Executive Director, Urban Water Division, DSE

15 APPENDIX F – Environment Protection Authority

The Environment Protection Authority (EPA) regulates Wannon Water's environment obligations via the *Environment Protection Act 1970*, various State Environment Protection Policies, Regulations and Guidelines. Wannon Water has an EPA Corporate Licence that governs discharges from its water reclamation plants to the environment.

The EPA provided guidance to Wannon Water for Water Plan 3 and the EPA's expectations are summarised in Table 15-1 Summary of EPA Guidance for Water Plan 3.

Theme	Water Plan 3	Water Plan 4
General	<ul style="list-style-type: none"> Compliance with legislation and regulations Implement the waste hierarchy for all relevant business activities Ensure efficient use of resources in business activities 	
Sewerage treatment and disposal	<ul style="list-style-type: none"> Continue monitoring, reporting and reducing discharge impacts and mixing zones Continue upgrade program for treatment plants 	<ul style="list-style-type: none"> Little to no significant environmental impact, or net environmental benefit provided All plants meet minimum standards
Sludge and Biosolids Management	<ul style="list-style-type: none"> Implement plans to reuse 100% of biosolids and reduce existing stockpiles over time 	<ul style="list-style-type: none"> Existing stockpiles reused. Biosolids and their beneficial properties (e.g. nutrients, organics, and carbon) reused for higher value uses
Management of the Sewerage System	<ul style="list-style-type: none"> Implement a risk-based improvement program for the sewerage system Implement sewerage backlog programs, including provision of sewerage in un-sewered industrial areas 	<ul style="list-style-type: none"> Continuously improve and reduce the environmental impacts of the sewerage system Reduce impact in un-sewered areas by providing sewerage management solutions (centralised or decentralised)
Water Efficiency	<ul style="list-style-type: none"> Work with communities and businesses to implement efficient water-use practices Comply with EREP obligations 	
Catchment, waterway and groundwater management	<ul style="list-style-type: none"> Implement environmental flows audit recommendations Implement irrigation drainage audit recommendations Managed aquifer recharge (MAR) schemes assessed and managed in accordance with EPA guidelines 	<ul style="list-style-type: none"> Environmental flows provided in line with waterway management strategies Irrigation drainage activities have little or no impact on catchment, waterways and groundwater MAR schemes do not adversely impact groundwater and aquifers

Table 15-1 Summary of EPA Guidance for Water Plan 3

Wannon Water has an independently audited and certified:

- Environmental Management System to AS/NZS ISO 14001: 2004 (Environmental management systems - Specification with guidance for use, and
- AS/NZS ISO 14004: 2004, Environmental management systems - General guidelines on principles, systems and supporting techniques, and
- Quality Management System to AS/NZS ISO 9001:2008, Quality management systems - Requirements

Wannon Water uses these formal frameworks to:

- Understand its environmental impacts
- Identify, rate and efficiently manage environment risks
- Ensure awareness and compliance with environmental legislation and regulations
- Have policies and procedures to avoid and manage environmental impacts

- Drive innovation, continuous improvement in environmental management

Wannon Water has included expenditure within Water Plan 3 to continue the above management approach.

Wannon Water has also developed the following strategies to drive environmental performance:

- Biodiversity and Land Management Strategy
- Energy and Carbon Management Strategy
- Sustainability Strategy
- Treatment Solids Management Strategy
- Waste Minimisation and Management Strategy
- Recycled Water Strategy

These strategies include action plans that are ongoing during Water Plan 3.

15.1 SEWERAGE TREATMENT AND DISPOSAL

Wannon Water treats sewerage and reuses or returns the treated effluent to the environment in accordance with its Corporate EPA Licence including:

- Ocean discharge that meets certain quality constraints at the point of discharge or within a mixing zone
- Land Reuse whereby treated effluent is applied to land for agricultural purposes in accordance with the Guidelines for Environmental Management: Use of Reclaimed Water
- Supply of recycled water to industrial customers for fit for purpose process water

The Portland Water Reclamation Plant is currently being upgraded to ensure compliance with the Corporate Licence.

For reuse on land, Wannon Water is required to have a management framework enabling the reuse of all effluent up to a 90th percentile wet year (refer to Guidelines for Environmental Management: Use of Reclaimed Water). Wannon Water has assessed performance of its land reuse systems and has identified the projects listed in Table 15-2 Summary of Reclaimed Water Compliance Projects.

Project	Year	Expenditure
Casterton Winter Storage and Irrigation Area	2014-18	\$1,864,716
Cobden Winter Storage	2014-18	\$2,119,051
Hamilton Winter Storage and Irrigation Area	2014-17	\$3,775,075
Heywood Winter Storage and Irrigation Area	2015-17	\$4,807,086
Total		\$9,168,358

Table 15-2 Summary of Reclaimed Water Compliance Projects

Whilst the above projects are listed, in dry years it has been assessed that the current infrastructure is capable of storing and irrigating all inflows. It is only in the wet years where insufficient winter storage and irrigation areas become limiting and emergency discharges of treated effluent off-site are required.

The above projects are scheduled towards the end of Water Plan 3 for the following reasons:

- Other higher priority projects are to be implemented first
- The impacts of infiltration and inflow works within the sewerage system can be assessed

- To enable investigation into treatment of the excess treated sewerage volumes to appropriate risk based standards for subsequent use as beneficial environmental flows

Wannon Water will continue its Ocean Outfall Monitoring Program during Water Plan 3 and will undertake an ecological risk assessment as specified in the guidance paper:

15.2 SLUDGE AND BIOSOLIDS MANAGEMENT

Wannon Water has a treatment solids strategy that outlines its plan for sludge management and biosolids reuse.

Wannon Water has established regional biosolids processing facilities at Camperdown and Hamilton and is in the process of establishing infrastructure at Portland to process sewerage sludge into biosolids suitable for land reuse. These facilities allow for ongoing sludge processing and reuse from the water reclamation plants that produce sewerage sludge on an ongoing daily basis including the Warrnambool, Port Fairy, Hamilton and the Portland water reclamation plants.

Wannon Water lagoon based water reclamation plants accumulate sewerage sludge in the bottom of the treatment

lagoons. This sludge requires periodic removal (de-sludging) when the volume of sludge is more than 30% of the lagoon volume.

In Water Plan 2 Wannon Water successfully implemented a program of bio-remediation of sewerage sludge at several sewerage lagoons which deferred the need to incur de-sludging expenditure.

The program of de-sludging sewerage lagoons for Water Plan 3 includes the operating expenditure projects shown in Table 15-3 Summary of Lagoon De-Sludging Projects.

De-Sludging Project	Year	Expenditure
Camperdown Domestic Lagoons 1 & 2	2013-14	\$422,829
Casterton Sludge lagoon	2014-15	\$41,518
Coleraine Lagoon 1	2016-17	\$228,608
Heywood Lagoon 1	2013-14	\$225,701
Terang Lagoon 1	2016-17	\$274,050
Terang Sludge Lagoon	2014-15	\$261,697
Total		\$1,454,403

Table 15-3 Summary of Lagoon De-Sludging Projects

Wannon Water will continue its research project to assess the benefits of integrating aquaculture into the treatment of sewage to reduce the costs and environmental impact of the treatment processes.

Over the past two years more than 20,000 fish have been monitored in experimental tanks at the Hamilton Water Reclamation Plant. Various species such as silver perch and bully mullet have been trialled. The popular household goldfish has proved most effective at consuming and removing nutrients and sludge from sewage.

Wannon Water intends to further develop the aquaculture project and its juvenile production facility has the capacity to produce 2 million goldfish per year for release into selected lagoon based sewage treatment plants during the Water Plan 3 regulatory period. This innovative project is expected to deliver significant efficiency savings associated with reduced de-sludging operations and sludge transportation costs.

15.3 MANAGEMENT OF THE SEWERAGE SYSTEM

Wannon Water has prepared a Sewerage System Management Plan in accordance with the EPA's Guidance Paper for Water Plan 3.

It is noted that the EPA Guidance Paper acknowledges that the EPA is working with the water industry to develop a risk-based approach for determining priorities for sewerage systems including wet-weather spill containment. While this risk-based approach is being developed by the EPA, the aim of the Sewerage System Management Plan is to work toward eliminating dry-weather spills and chronic leaks and ensuring that the sewerage system can contain flows up to a one in five year rainfall event.

Wannon Water did not prepare a Sewerage System Management Plan for Water Plan 2 and has not undertaken a Statutory Audit to date. The EPA has formally agreed with Wannon Water's proposal to:

- Prepare of an augmented Sewerage System Management Plan for Water Plan 3, which also includes an assessment of Water Plan 2 projects related to sewerage system management and the degree which these projects have had on managing environmental risks
- Not to undertake a statutory audit of the Water Plan 2 sewerage system management related projects
- Include a statutory audit of the Water Plan 3 Sewerage System Management Plan in 2015-16 as progress of the plan can be assessed together with an investigation of whether the projects already constructed are achieving a satisfactory environmental risk reduction in readiness for the Water Plan 4 planning process

Wannon Water's augmented Sewerage System Management Plan is now complete. The principle works contained in the plan include:

- Previous risk reduction measures undertaken by Wannon Water in Water Plan 2, including:
 - The projects undertaken
 - The level of risk reduction for the environment achieved post completion of the project
 - The treatment and water reuse strategy for Wannon Water, including drivers for treatment and reuse, future treatment options, and assessment of current and future disposal and reuse options
- An assessment of individual sewerage systems under Wannon Water's management, including:
 - Population and connection forecasts for the system
 - The capacity of each major component of the system, including the sewer network (including pipework and pump stations), treatment facilities, and reuse of reclaimed water
- The potential options to increase reuse or improve reuse within the system
- The current level of inflow and infiltration affecting the system and how this could be reduced
- The required works to improve each system and reduce environmental risk associated with each system

In addition to the Reclaimed Water Compliance Projects listed in Table 15-2, the projects in Table 15-4 Summary of Sewerage System Management Plan Projects are proposed as a result of the strategy.

Category	Project Name	Year	Expenditure
Water Reclamation Plants	Asset Renewal at water reclamation plants -	2013-18	\$1,276,740
	Warrnambool Water Reclamation Plant: Blowers, diffusers and other replacements	2013-18	\$2,435,400
	Warrnambool Water Reclamation Plant: Replace TEMA belt press	2016-17	\$1,532,275
	Hamilton Water Reclamation Plant: Upgrade of clarifier, trickling filter, lagoon integrity	2013-18	\$1,015,980
	Portland Water Reclamation Plant - Septage and brine receival facility	2015-16	\$670,842
	Port Fairy Industrial Water Reclamation Plant (third party funded)	2013-18	\$611,925
	Camperdown Industrial Water Reclamation Plant: Replace sludge lagoon clay liner	2016-17	\$410,445
	- sludge processing site		
	Hamilton Tertiary Recycled Water Plant: Replace all membranes	2016-17	\$147,600
	Sewerage Networks	Asset Renewals – Sewer pump stations and reticulation systems	2013-18
CCTV of Sewer Networks and reduction of infiltration		2013-18	\$1,904,391
Warrnambool trunk sewers capacity upgrades		2014-16	\$1,743,994

Category	Project Name	Year	Expenditure
	Sewer pump station upgrades	2013-18	\$1,008,600
	Upgrade sewer pump stations to duty/standby pump stations	2013-18	\$1,045,008
	Rising mains cleaning to improve efficiency	2013-18	\$322,260
	Transportable switchboard for emergency backup for critical assets	2015-16	\$201,720
	Camperdown: Upsizing of reticulation sewers	2015-16	\$105,288
Other	Investigation of improving waste management in Small Towns	2015-16	\$56,580
Total			\$21,965,727

Table 15-4 Summary of Sewerage System Management Plan Projects

In addition to the projects listed in Table 15-4 Summary of Sewerage System Management Plan Projects, Wannon Water plans to undertake a major upgrade to its Warrnambool Water Reclamation Plant via the addition of a fifth treatment cell to complement the existing four treatment cells in Water Plan 4

at an estimated cost of \$20.13M. This project was able to be deferred from Water Plan 2 as a result of an efficiency project at the site that generated approximately 20% spare aeration capacity.

15.4 BACKLOG SEWERAGE

By the end of the Water Plan 2 regulatory period, Wannon Water will have completed all backlog sewerage schemes contained within the Domestic Wastewater Management Plans of local councils in south west Victoria.

At the request of some Councils, Wannon Water has investigated a number of potential sewerage schemes for small unsewered towns within its operating area, including:

- Cape Bridgewater
- Nelson
- Narrawong
- Merino
- Mailors Flat
- Winslow
- Hawkesdale
- Macarthur

These investigations have found the costs of providing new services for small population communities is very high on a per property basis, to the extent that it would be highly unlikely that a reticulated sewerage scheme would garner community support. Accordingly, Wannon Water has not included any backlog sewerage systems within Water Plan 3.

Wannon Water has allowed \$57,500 in 2015-16 to further investigation of providing sewerage services to Mailors Flat (a satellite settlement of Warrnambool), Lismore and Derrinallum.

In response to draft Water Plan 3 the Corangamite Shire requested Wannon Water consider sewerage schemes for Lismore and Derrinallum. Wannon Water has responded to the Shire advising:

- Wannon Water has not included any sewerage schemes in Water Plan 3 as schemes are undertaken on a full cost recovery basis and therefore do not impact pricing outcomes. As such, Wannon Water is able to implement a sewerage scheme outside the Water Plan process.
- A sewerage scheme is one option to address public health and environmental problems associated with poor functioning onsite domestic wastewater systems. Sewerage schemes are typically also the most expensive option and have difficulty garnering community support.
- Should Council wish to pursue improved public health and environmental outcomes associated with on-site domestic wastewater systems at Lismore or Derrinallum, Wannon Water recommends that Council explores with each community the extent of the public health and environmental issues associated with onsite wastewater management, all the options to improve public health and environmental outcomes and the cost impacts of each option on the community.
- Wannon Water would be able to assist Council in relation to the cost impacts of the sewerage scheme option. Should the community consultation process result in clear community support for a sewerage scheme, then Wannon Water would commence the process to implement a scheme.

15.5 MANAGEMENT OF GREENHOUSE GAS EMISSIONS

In relation to greenhouse gases, the EPA's guidance requires licencing and works approval processes to demonstrate compliance with the:

- State Environment Protection Policy (Air Quality Management), and
- Protocol for Environmental Management (Greenhouse Gas Emissions and Energy Efficiency in Industry) 2002

Wannon Water will comply with the above requirements for any works approval applications during Water Plan 3.

Wannon Water's Energy and Carbon Management Strategy has been successful in reducing greenhouse gas emissions as shown in Figure 15-1 Greenhouse Gas Emissions. The largest contributor to the increased emissions in 2011-12 was due to the transfer of water from the Gellibrand River in the Otway's. The dry summer in 2011-12 increased demand for water, necessitating additional pumping from the North and South Otway pump stations.

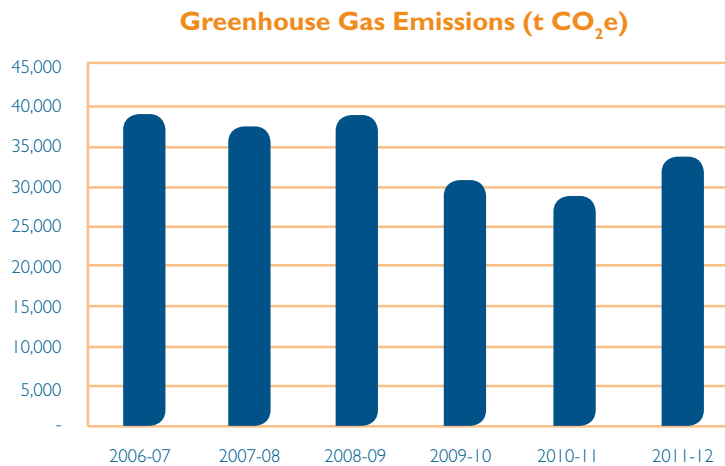


Figure 15-1 Greenhouse Gas Emissions

For Water Plan 3, Wannon Water will focus on greenhouse gas emission reduction by improving energy efficiency funded by energy savings achieved during the Water Plan 3 period. The initial focus will be on mapping energy use across the

corporation linking disparate data sets and presenting easy-to-understand information to operational units to facilitate a greater understanding of current processes and efficiency opportunities.

15.6 WATER & RESOURCE EFFICIENCY

Wannon Water promotes its Permanent Water Savings Measures and administers the waterMAP program and will continue with these programs during Water Plan 3.

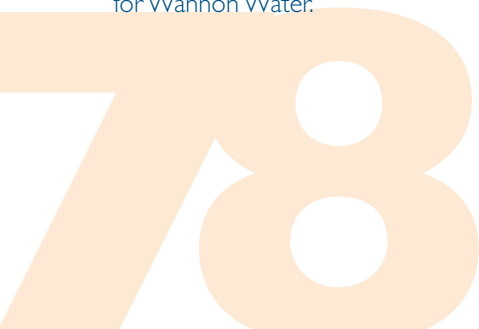
Wannon Water is engaged in a program to find and reduce water losses within its water supply systems. The Non-Revenue Water program involves leak detection through

metering and pipe inspections and also leakage reduction through repair and replacement of leaking pipework. Table 15-5 Summary of Water Efficiency Projects identifies the proposed expenditure to improve water efficiency of Wannon Water's water supply networks.

Project	Year	Expenditure
Non-Revenue Water reticulation leakage monitoring works	2013-15	\$101,620
Non-Revenue Water - leakage detection and repair	2013-18	\$609,756
Total		\$711,376

Table 15-5 Summary of Water Efficiency Projects

Wannon Water has no Environment and Resource Efficiency Plan (EREP) obligations as its facilities do not trigger the EREP threshold levels. However, resource efficiency is a key driver for Wannon Water.



15.7 CATCHMENT, WATERWAY AND GROUNDWATER MANAGEMENT

Wannon Water harvests water from a number of surface water catchments in accordance with bulk entitlements and groundwater under licence from Southern Rural Water. Wannon Water does not have any managed aquifer recharge schemes, nor is it proposing any in Water Plan 3.

Wannon Water has the necessary infrastructure, operations and water resources to comply with its bulk entitlement and environmental flow obligations during Water Plan 3.

Consistent with an action set out in the Western Region Sustainable Water Strategy (WRSWS) published by the State Government, Wannon Water has included \$203,252 (50% of which is to be funded by third parties) to investigate the impacts of groundwater extraction from the Newlingbrook Aquifer in lieu of summer extractions from the Gellibrand River. This, and other waterway and groundwater projects, is listed in Table 15-6 Groundwater and Waterway Projects.

Project	Year	Expenditure
Groundwater modelling software	2013-14	\$8,003
Newlingbrook aquifer investigation	2015-16	\$101,626
Shallow groundwater sustainability, small towns assessments	2015-16	\$50,813
Installation of Bore Level Monitoring	2013-14	\$143,547
Total		\$303,989

Table 15-6 Groundwater and Waterway Projects

15.8 EPA'S FORMAL RESPONSE TO DRAFT WATER PLAN 3

The EPA, at officer level, has indicated it is satisfied with Wannon Water's proposed response to its Water Plan 3 Guidance Paper however no formal advice has been received to date.



16 APPENDIX G – Regulated Tariffs and Charges

1.0 WATER TARIFFS

WATER TARIFF GROUPS

Group A:

Portland, Heywood, Port Fairy, Allansford, Noorat/
Glenormiston, Camperdown, Carlisle, Carpendeit, Cobden,
Koroit, Lismore/Derrinallum, Mortlake, Purnim, Simpson, Terang
and Warrnambool

Group B:

Balmoral, Caramut, Cavendish, Dunkeld, Glenthompson,
Hamilton, Penshurst and Tarrington

Group C:

Peterborough, Port Campbell and Timboon

Group D:

Dartmoor, Casterton, Coleraine, Macarthur, Merino and
Sandford

Group E:

Darlington

1.1 URBAN RESIDENTIAL, NON-RESIDENTIAL AND RURAL WATER SERVICE CHARGES (per year)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Service Charge Group A -					
0-20mm connection	155.29	0%	0%	0%	0%
21-25mm connection	231.20	0%	0%	0%	0%
26-32mm connection	621.19	0%	0%	0%	0%
33-40mm connection	1,087.22	0%	0%	0%	0%
41-50mm connection	1,708.37	0%	0%	0%	0%
51-80mm connection	2,484.98	0%	0%	0%	0%
81-100mm connection	3,593.11	0%	0%	0%	0%
101-150mm connection	5,019.03	0%	0%	0%	0%
151+mm connection	6,629.92	0%	0%	0%	0%
Service Charge Group B -					
0-20mm connection	187.66	0%	0%	0%	0%
21-25mm connection	279.38	0%	0%	0%	0%
26-32mm connection	750.66	0%	0%	0%	0%
33-40mm connection	1,313.82	0%	0%	0%	0%
41-50mm connection	2,064.40	0%	0%	0%	0%
51-80mm connection	3,002.87	0%	0%	0%	0%
81-100mm connection	4,341.96	0%	0%	0%	0%
101-150mm connection	6,065.05	0%	0%	0%	0%
151+mm connection	8,011.65	0%	0%	0%	0%
Service Charge Group C -					
0-20mm connection	280.29	0%	0%	0%	0%
21-25mm connection	417.30	0%	0%	0%	0%
26-32mm connection	1,121.15	0%	0%	0%	0%
33-40mm connection	1,962.26	0%	0%	0%	0%
41-50mm connection	3,083.31	0%	0%	0%	0%
51-80mm connection	4,484.95	0%	0%	0%	0%
81-100mm connection	6,484.93	0%	0%	0%	0%
101-150mm connection	9,058.47	0%	0%	0%	0%
151+mm connection	11,965.78	0%	0%	0%	0%

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Service Charge Group D -					
0-20mm connection	315.31	0%	0%	0%	0%
21-25mm connection	469.46	0%	0%	0%	0%
26-32mm connection	1,261.26	0%	0%	0%	0%
33-40mm connection	2,207.46	0%	0%	0%	0%
41-50mm connection	3,468.57	0%	0%	0%	0%
51-80mm connection	5,045.37	0%	0%	0%	0%
81-100mm connection	7,295.23	0%	0%	0%	0%
101-150mm connection	10,190.33	0%	0%	0%	0%
151+mm connection	13,460.93	0%	0%	0%	0%

Service Charge Group E -					
Service charge	155.29	0%	0%	0%	0%

1.2 URBAN RESIDENTIAL WATER USAGE CHARGES (per kL)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Usage Charge Group A -					
Usage charge tier 1 (0-438 litres/day)	1.7419	0%	0%	0%	0%
Usage charge tier 2 (439-822 litres/day)	2.0913	0%	0%	0%	0%
Usage charge tier 3 (822+ litres/day)	3.1369	0%	0%	0%	0%
Usage Charge Group B -					
Usage charge tier 1 (0-438 litres/day)	2.3207	0%	0%	0%	0%
Usage charge tier 2 (439-822 litres/day)	2.7861	0%	0%	0%	0%
Usage charge tier 3 (822+ litres/day)	4.1792	0%	0%	0%	0%
Usage Charge Group C -					
Usage charge tier 1 (0-438 litres/day)	1.3472	0%	0%	0%	0%
Usage charge tier 2 (439-822 litres/day)	1.6175	0%	0%	0%	0%
Usage charge tier 3 (822+ litres/day)	2.4262	0%	0%	0%	0%
Usage Charge Group D -					
Usage charge tier 1 (0-438 litres/day)	1.6565	0%	0%	0%	0%
Usage charge tier 2 (439-822 litres/day)	1.9888	0%	0%	0%	0%
Usage charge tier 3 (822+ litres/day)	2.9830	0%	0%	0%	0%
Usage Charge Group E -					
Usage charge	0.5723	0%	0%	0%	0%

I.3 URBAN NON-RESIDENTIAL WATER USAGE CHARGES (per kL)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Usage Charge Group A					
Potable Water (per kL)	2.0913	0%	0%	0%	0%
Usage Charge Group B					
Potable Water (per kL)	2.7861	0%	0%	0%	0%
Usage Charge Group C					
Potable Water (per kL)	1.6175	0%	0%	0%	0%
Usage Charge Group D					
Potable Water (per kL)	1.9888	0%	0%	0%	0%
Usage Charge Group E					
Usage Charge (per kL)	0.5723	0%	0%	0%	0%

I.4 RURAL WATER USAGE CHARGES (per kL)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Usage Charge Group A					
Potable Water (per kL)	2.0913	0%	0%	0%	0%
Non-Potable Water (per kL)	1.7419	0%	0%	0%	0%
Usage Charge Group B					
Potable Water (per kL)	2.7861	0%	0%	0%	0%
Non-Potable Water (per kL)	2.3207	0%	0%	0%	0%
Usage Charge Group C					
Potable Water (per kL)	1.6175	0%	0%	0%	0%
Non-Potable Water (per kL)	1.3472	0%	0%	0%	0%
Usage Charge Group D					
Potable Water (per kL)	1.9888	0%	0%	0%	0%
Non-Potable Water (per kL)	1.6565	0%	0%	0%	0%
Usage Charge Group E					
Usage Charge (per kL)	0.5723	0%	0%	0%	0%

I.5 RURAL WATER USAGE SURCHARGE - ALL GROUPS (per kL)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Rural Water Usage Surcharge (per kL)	2.4014	0%	0%	0%	0%

I.6 UN-CONNECTED WATER SERVICE CHARGE (per year)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Service Charge Group A	155.29	0%	0%	0%	0%
Service Charge Group B	187.66	0%	0%	0%	0%
Service Charge Group C	280.29	0%	0%	0%	0%
Service Charge Group D	315.31	0%	0%	0%	0%

1.7 UN-METERED WATER SERVICE CHARGE (per year) - ALL GROUPS

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Un-Metered Service Charge	1,325.63	0%	0%	0%	0%

2.0 SEWERAGE TARIFFS

Group A:

Allansford, Koroit, Mortlake, Peterborough, Timboon,
Camperdown, Cobden, Simpson, Terang, Warrnambool,
Dunkeld, Port Campbell and Port Fairy

Group B:

Casterton, Coleraine and Hamilton

Group C:

Heywood and Portland

2.1 SEWERAGE TARIFFS CONNECTED SERVICE (per year)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Sewerage Charge Group A	713.05	0%	0%	0%	0%
Sewerage Charge Group B	705.57	0%	0%	0%	0%
Sewerage Charge Group C	690.79	0%	0%	0%	0%

2.2 SEWERAGE TARIFFS UN-CONNECTED SERVICE (per year)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Sewerage Charge Group A	213.91	0%	0%	0%	0%
Sewerage Charge Group B	211.65	0%	0%	0%	0%
Sewerage Charge Group C	207.21	0%	0%	0%	0%

2.3 NON-RESIDENTIAL SEWAGE VOLUME CHARGE

Group 1: Warrnambool, Allansford and Koroit

Group 2: Hamilton

Group 3: Portland

Group 4: Port Fairy

Group 5: Camperdown, Casterton, Cobden,
Coleraine, Dunkeld, Heywood, Mortlake,
Peterborough, Port Campbell, Simpson, Terang
and Timboon

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Group 1 - Volume Charge (\$/kl)	0.6526	12%	12%	12%	12%
Group 2 - Volume Charge (\$/kl)	1.2371	0%	0%	0%	0%
Group 3 - Volume Charge (\$/kl)	1.4810	0%	0%	0%	0%
Group 4 - Volume Charge (\$/kl) **	2.0813	-3%	-3%	-3%	-3%
Group 5 - Volume Charge (\$/kl) **	1.7988	0%	0%	0%	0%

** Indicates that there will be no CPI adjustment

3.0 TRADE WASTE CHARGES

3.1 MAJOR TRADE WASTE CHARGES

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Volume Charge (\$/kL)	0.4723	2%	2%	2%	2%
Quality Charges:					
BOD (\$/kg)	1.0850	2%	2%	2%	2%
SS (\$/kg)	0.1972	2%	2%	2%	2%
Ammonia (\$/kg)	1.1365	2%	2%	2%	2%

3.2 MINOR TRADE WASTE CHARGES

Group 1: Warrnambool, Allansford and Koroit

Group 2: Hamilton

Group 3: Portland

Group 4: Port Fairy

Group 5: Camperdown, Casterton, Cobden, Coleraine, Dunkeld, Heywood, Mortlake, Peterborough, Port Campbell, Simpson, Terang and Timboon

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Group 1 -					
Annual Fee - Minor Trade Waste Agreement	405.13	2%	2%	2%	2%
Annual Fee - Minor Deemed Agreement	202.57	2%	2%	2%	2%
Volume Charge (\$/kL)	0.6526	12%	12%	12%	12%
Group 2 -					
Annual Fee - Minor Trade Waste Agreement	405.13	2%	2%	2%	2%
Annual Fee - Minor Deemed Agreement	202.57	2%	2%	2%	2%
Volume Charge (\$/kL)	1.2371	0%	0%	0%	0%
Group 3 -					
Annual Fee - Minor Trade Waste Agreement	405.13	2%	2%	2%	2%
Annual Fee - Minor Deemed Agreement	202.57	2%	2%	2%	2%
Volume Charge (\$/kL)	1.4810	0%	0%	0%	0%
Group 4 -					
Annual Fee - Minor Trade Waste Agreement	405.13	2%	2%	2%	2%
Annual Fee - Minor Deemed Agreement	202.57	2%	2%	2%	2%
Volume Charge (\$/kL) **	2.0813	-3%	-3%	-3%	-3%
Group 5 -					
Annual Fee - Minor Trade Waste Agreement	405.13	2%	2%	2%	2%
Annual Fee - Minor Deemed Agreement	202.57	2%	2%	2%	2%
Volume Charge (\$/kL) **	1.7988	0%	0%	0%	0%

**Indicates that there will be no CPI adjustment

4.0 FIRE SERVICE CHARGES

4.1 FIRE SERVICE FEES

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
0-25mm connection	120.00	0%	0%	0%	0%
26-32mm connection	350.00	0%	0%	0%	0%
33-40mm connection	600.00	0%	0%	0%	0%
41-50mm connection	750.00	0%	0%	0%	0%
51-80mm connection	1,400.00	0%	0%	0%	0%
81-100mm connection	2,300.00	0%	0%	0%	0%
101-150mm connection	3,230.00	0%	0%	0%	0%
151+mm connection	4,270.00	0%	0%	0%	0%

5.0 NEW CUSTOMER CONTRIBUTIONS

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Water (per lot)					
Category 1 - lot size < 450 sq m	608.64	0%	0%	0%	0%
Category 2 - lot size 450-1,350 sq m	1,217.30	0%	0%	0%	0%
Category 3 - lot size > 1,350 sq m	2,434.63	0%	0%	0%	0%

Sewer (per lot)					
Category 1 - lot size < 450 sq m	608.64	0%	0%	0%	0%
Category 2 - lot size 450-1,350 sq m	1,217.30	0%	0%	0%	0%
Category 3 - lot size > 1,350 sq m	2,434.63	0%	0%	0%	0%

Customer Contributions for dual pipe recycled water developments or subdivisions

Recycled Water (per lot)					
Category 1 - lot size < 450 sq m	608.64	0%	0%	0%	0%
Category 2 - lot size 450-1,350 sq m	1,217.30	0%	0%	0%	0%
Category 3 - lot size > 1,350 sq m	2,434.63	0%	0%	0%	0%

Water (per lot)					
Category 1 - lot size < 450 sq m	304.31	0%	0%	0%	0%
Category 2 - lot size 450-1,350 sq m	608.64	0%	0%	0%	0%
Category 3 - lot size > 1,350 sq m	1,217.30	0%	0%	0%	0%

Sewer (per lot)					
Category 1 - lot size < 450 sq m	608.64	0%	0%	0%	0%
Category 2 - lot size 450-1,350 sq m	1,217.30	0%	0%	0%	0%
Category 3 - lot size > 1,350 sq m	2,434.63	0%	0%	0%	0%

6.0 MISCELLANEOUS CHARGES

6.1 WATER TAPPING FEE, INCLUDING FIRE SERVICES (PER TAPPING)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Water Tapping - 20mm connection	244.00	0%	0%	0%	0%
Water Tapping - 25mm Connection	275.00	0%	0%	0%	0%

6.2 WATER METERS (PER METER)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Water Meter - 20mm	108.00	0%	0%	0%	0%
Water Meter - 25mm	168.00	0%	0%	0%	0%

6.3 WATER DISCONNECTION FEE (PER DISCONNECTION)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
All sizes	215.00	0%	0%	0%	0%

6.4 SEWER CUT IN (PER CUT IN)

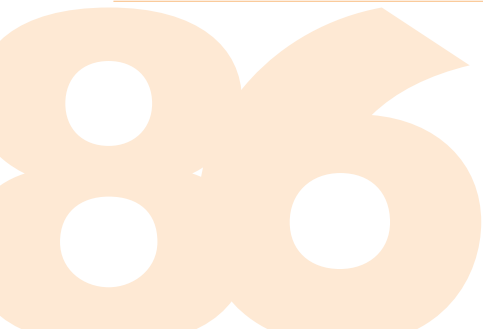
	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Sewer Cut In 150mm and below	635.00	0%	0%	0%	0%
Sewer Cut In 225mm and below	745.00	0%	0%	0%	0%

6.5 SEWER CONNECTION APPLICATION (PER APPLICATION)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Sewer Connection Application Residential	96.00	0%	0%	0%	0%
Sewer Connection Application Residential < 1 Business Day	195.00	0%	0%	0%	0%
Sewer Connection Application Non-Residential	132.00	0%	0%	0%	0%

6.6 SEWER DISCONNECTION APPLICATION (PER APPLICATION)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
All sizes	127.00	0%	0%	0%	0%



6.7 INFORMATION STATEMENT (PER STATEMENT)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Information Statement Request	68.00	0%	0%	0%	0%
Information Statement Request < 1 Business Day	132.00	0%	0%	0%	0%

6.8 METER READING (PER READ)

	Price in 1-Jan-13 \$ See Note 1 below	PPM Year 1	PPM Year 2	PPM Year 3	PPM Year 4
Meter Reading Fee (applies to both Tenant and Special Readings)	40.00	0%	0%	0%	0%

Note 1: Prices are expressed in 1 January, 2013 dollars as per the ESC price review template (using March 2012 CPI as per ESC's assumptions and will be increased annually by CPI, including for the 2013-14 prices).

17 APPENDIX H – Recycled Water Pricing Principles

RECYCLED WATER - PRICING PRINCIPLES

The following pricing principles underpin Wannon Water's recycled water pricing policy:

- Where an agriculture recycling scheme is in place, the 'polluter pays' principle applies and the cost of recycling will be met through sewerage service charges and trade waste charges
- Where additional water treatment is required for potable substitution, the 'beneficiary pays' principle applies full cost recovery to the recycled water users where possible. As a minimum, charges for recycled water must cover operating costs (including administration and compliance costs)
- Where the benefits of recycling accrue to the wider community, and no contract exists for the sale of recycled water (such as for environmental flows) the cost of the project will be met from revenue from other services
- Revenue will be maximised. Price will be selected to reflect the customer's willingness to pay, guided by the marginal benefits of recycled water use. This will assist in allocating a scarce resource to the highest value user
- Pricing arrangements will have regard to the long-term sustainability of customers and their operations. Customers must remain viable to ensure ongoing demand.
- The price for recycled water will include a volumetric component to provide a signal to conserve resources
- The price will provide an incentive for use of recycled water as an alternative to potable or raw water wherever suitable, to maximise the uptake of recycled water.
- The price will avoid perverse incentives, which may inadvertently encourage risk-taking in the use of water. If the price is too low, it may encourage customers to substitute recycled water for (more expensive) potable water when it is not appropriate (i.e. for drinking).
- Where full cost recovery is not possible, the project will be cross-subsidised by charges for other water and sewer services. The full costs and benefits of recycling (including environmental and social benefits) are to be identified and measured, and consultation will take place with the community to obtain their approval for expenditure on the project

WILLINGNESS TO PAY PRINCIPLES

The upper price bound will be set by the customer's willingness to pay. The following elements should be considered when determining customer's willingness to pay:

- The availability and price of substitutes, particularly potable water and raw water (which may provide a price ceiling to recycled water)
- The value or benefit of recycled water for the proposed use
- Any costs which will be incurred in using recycled water (capital and operating costs of delivery network, compliance costs)
- The value of additional benefits to the user of using recycled water as compared to alternative water sources (i.e. the benefit of dissolved nutrients, environmental benefits, additional security of supply if recycled water use is not subject to restrictions during drought periods)
- The certainty of supply and length of tenure, particularly relative to any capital investments required to use recycled water
- Any other attitudes or perceptions held by the customer (particularly those relating to risk and quality)

PRICING STRUCTURE

The pricing structure is required to send appropriate signals to the customer to ensure sustainable management of the recycled water while reducing Wannon Water's risk of having a Section 30A discharge.

A) PRICING BY TIME OF YEAR

- **Peak Demand** - this allows a higher tariff to be charged during summer when the recycled water is at peak demand. This will then allow Wannon Water to account for the significant cost of storing the water until summer.
- **Shoulder Demand** – during spring and autumn, when the irrigation season is commencing.
- **Off-Peak Demand** – charges are lower during winter as recycled water taken at this stage allows Wannon Water to manage small storages and therefore reduce costs.

Pricing by Month

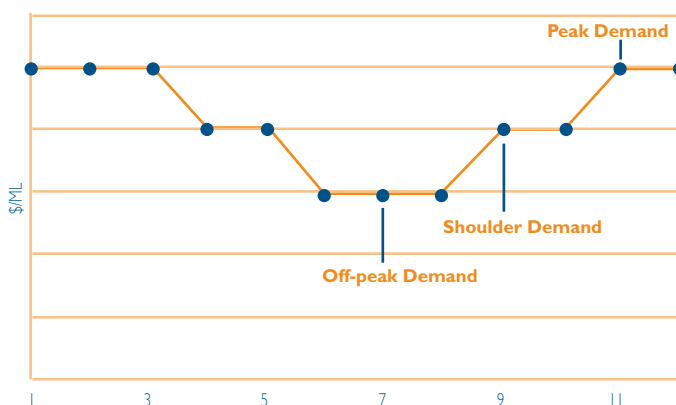


Table 17-1 Pricing Recycled Water by Time of Year

B) PRICING STRUCTURE BY VOLUME

Pricing also applies differential charges to three different categories of recycled water:

- **Base Load** – the anticipated sewerage volumes into the treatment plant. The pricing structure by month would apply to this volume.
- **At risk load** – infiltration and carry over water from the previous year. This water is not guaranteed but can be purchased at a lower cost.
- **High Infiltration Load** – above the at-risk load and places significant pressure on Wannon Water’s ability to store the recycled water. A lower price reflects the benefits to Wannon Water from its consumption.

Pricing by Volume

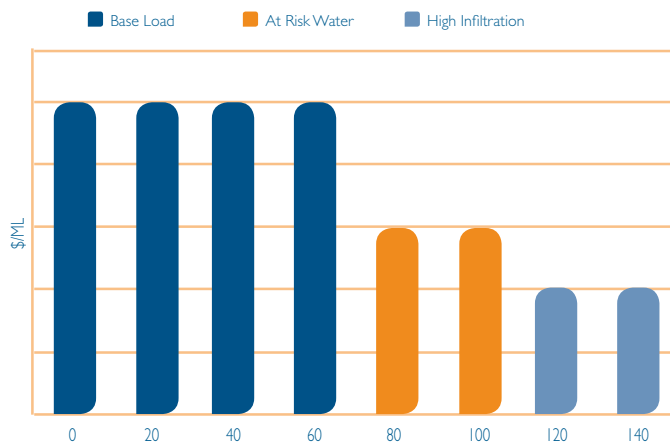


Table 17-2 Pricing by Volume



18 APPENDIX I – New Customer Contributions

18.1 APPLICATION OF THE DRAFT NEGOTIATING FRAMEWORK

This draft negotiating framework forms part of Wannon Water's Water Plan for the period 2013-18.

18.2 PURPOSE

This draft negotiating framework sets out procedural and information requirements relevant to services to which developer charges apply, as defined in the WIRO. It requires Wannon Water and connection applicants to negotiate in good faith to agree the price, standards and conditions of services to be provided. It also provides for transparent information to enable the connection applicant to understand the reasons for decisions made by Wannon Water.

The requirements set out in this negotiating framework are in addition to any requirements or obligations contained in the *Water Act 1989*. In the case of inconsistency between the *Water Act 1989* and this negotiating framework, the *Water Act 1989* will prevail.

This negotiating framework does not alter the rights of a connection applicant to seek a review of Wannon Water's decision by the Victorian Civil and Administrative Tribunal.

18.3 WHO THIS NEGOTIATING FRAMEWORK APPLIES TO

This draft negotiating framework applies to Wannon Water and to any property owner – generally a property developer – that is a connection applicant who requests connection to Wannon Water's works in accordance with section 145 of the *Water Act 1989*.

It also applies to Wannon Water in responding to such requests from a connection applicant.

18.4 NO OBLIGATION TO PROVIDE SERVICE, GOOD FAITH OBLIGATION

Nothing in the draft negotiating framework imposes an obligation on Wannon Water to allow the connection applicant to connect to Wannon Water's works or provide services to the connection applicant.

Wannon Water can refuse its consent, or consent subject to

any terms and conditions that Wannon Water thinks fit, as provided under section 145(3) of the *Water Act 1989*.

However, Wannon Water and the connection applicant must negotiate in good faith the price, terms and conditions for services sought by the connection applicant.

18.5 TIMEFRAMES

Wannon Water and the connection applicant will use reasonable endeavours to achieve the following timeframes:

1. Wannon Water provides initial commercial information relating to services and identifies any additional information required to be submitted by the connection applicant within 28 days of receipt of service advice request from the connection applicant
2. Agree the milestones, information requirements and any other relevant issues prior to the issue of an Offer of Conditions; and
3. Adhere to any timetable established for negotiations, and progress negotiations in an expeditious manner.

18.6 PROVISION OF INFORMATION BY THE CONNECTION APPLICANT

The connection applicant is required to provide sufficient information to enable Wannon Water to assess servicing requirements. Additionally, the connection applicant is required to provide additional commercial information if requested by Wannon Water.

Wannon Water and the connection applicant are required to maintain confidentiality at all times.

18.7 PROVISION OF INFORMATION BY WANNON WATER

Wannon Water is required to provide the following information to the connection applicant in accordance with section 268(4) of the *Water Act 1989*:

1. the amount of the payment required;
2. the reason why the payment is required;
3. any works or services that have been or will be provided;
4. the property in relation to which payment is required;
5. if payments are required in relation to a group of properties, the amounts required in relation to each property;
6. the right of the owner to object and apply for a review under section 271 of the *Water Act 1989*; and
7. that details of the proposed services and the costs are available for inspection, free of charge, at Wannon Water's office during normal business hours.

18.8 PRICING PRINCIPLES

Wannon Water's new customer contribution charges will:

1. have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
 2. have regard to the incremental future revenues that will be earned from customers at that connection; and
 3. be greater than the avoidable cost of that connection and less than the standalone cost of that connection.
- In setting new customer contribution charges, Wannon Water will comply with:
1. the regulatory principles set out in clause 14 of the WIRO; and
 2. any specific pricing principles approved by the Essential Services Commission as part of Wannon Water's water plan.

18.9 CONSULTATION WITH AFFECTED PARTIES

If Wannon Water considers that persons other than the connection applicant may be affected by proposed connection services, then:

1. subject to reasonable confidentiality requirements, Wannon Water will share any necessary information with others potentially affected to assess impacts; and
2. the connection applicant will allow sufficient time for reasonable consultation with affected parties to occur.

18.10 TERMINATION OF NEGOTIATIONS

The connection applicant may elect not to continue with its application for a service to which a developer charge applies, and may terminate the negotiations by giving Wannon Water written notice of its decision to do so.

written notice of its decision to do so where Wannon Water believes on reasonable grounds that the connection applicant is not conducting the negotiation under this negotiating framework in good faith.

Wannon Water may terminate a negotiation under this negotiating framework by giving the connection applicant

18.11 DISPUTE RESOLUTION

In accordance with section 271 of the *Water Act 1989*, a connection applicant may, within one month of issue of an Offer of Conditions object in writing to Wannon Water on any of the following grounds:

1. in the case of a notice under section 268 (provision of new services), that the property of the owner will not benefit from the provision of the services;
2. if there are several properties that will benefit, that the basis of distribution of the cost between the owners of those properties is unreasonable;
3. that the amount is excessive;
4. if there are several properties that will benefit, that any owner who has been required to pay should not be required to do so, or that any owner who has not been required to pay should be required to do so;
5. in the case of a notice under section 269 (increased services), that the use of the services has not increased, or will not increase, as the case requires;
6. that the payment was not set in accordance with an Order under section 4D(1)(a) of the *Water Industry Act 1994* or in accordance with the *Essential Services Commission Act 2001*; and
7. in the case of a notice under section 268(1), any other grounds.

Wannon Water will, within 2 months after receipt of an objection, notify the connection applicant of its decision on the objection.

The connection applicant may apply to the Victorian Civil and Administrative Tribunal for review of Wannon Water's decision.

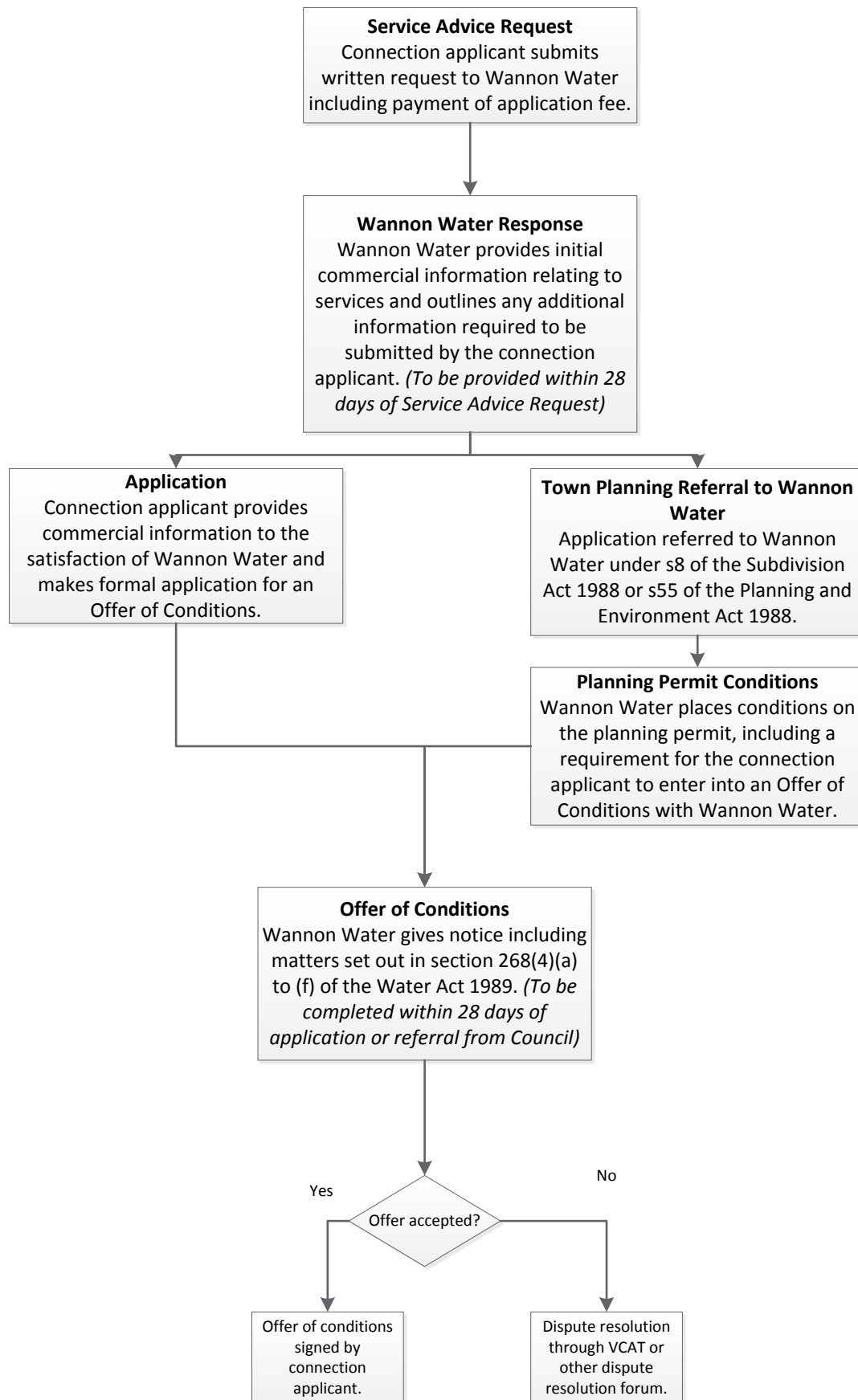


Table 18-1 New Customer Contributions Negotiating Framework



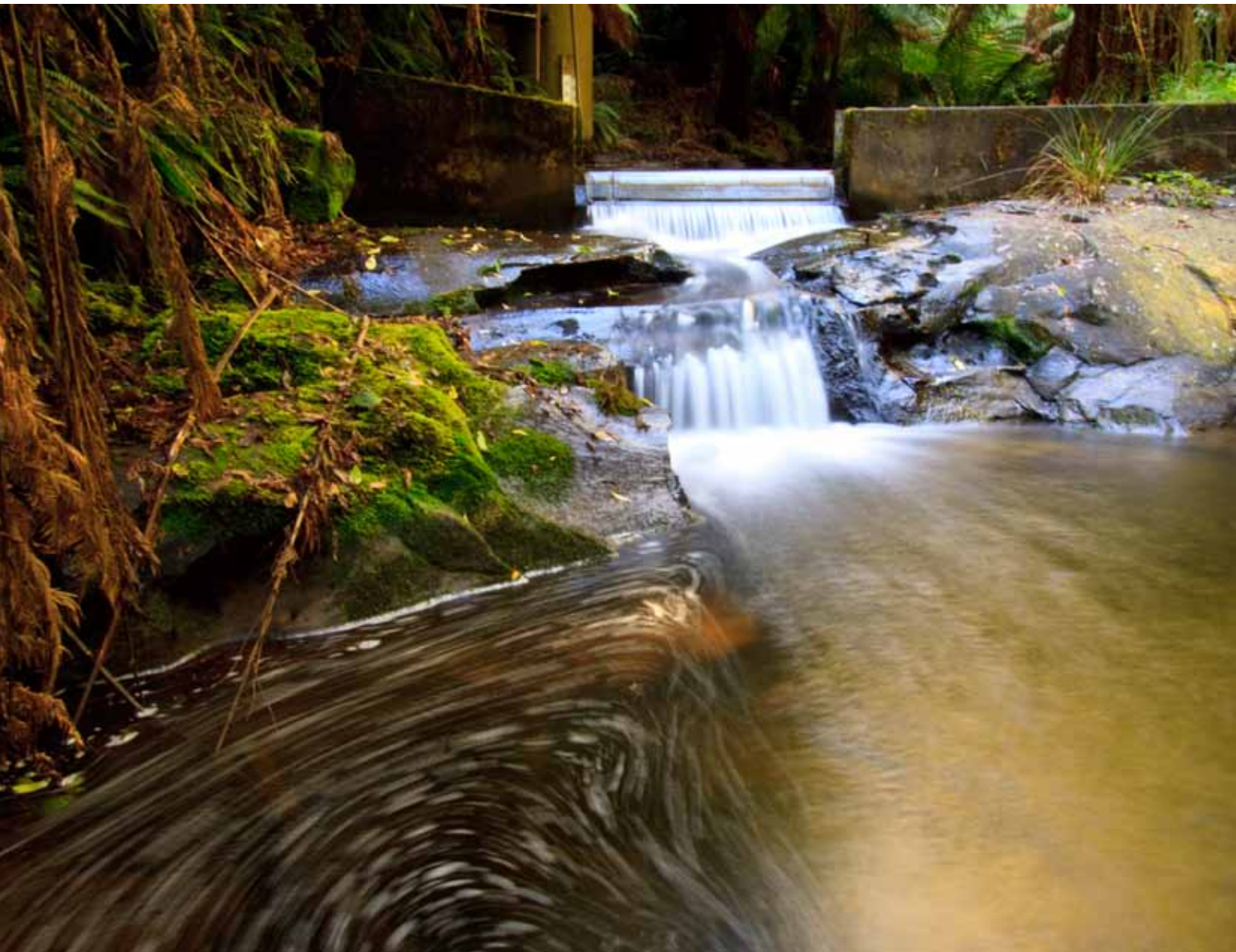
19 APPENDIX J – Major Trade Waste Service Charge Pricing Principle

The Major Trade Waste Service Charge is set as the customer's proportional share of the total major trade waste revenue requirement minus the total estimated revenue associated with major trade waste volume and quality charges, noting that the trade waste volume and quality charges are set at the long run marginal cost.

The above calculation is based on flow and quality of Major Trade Waste Customer discharge in 2011-12 to set a service

charge in 2013-14. This service charge escalates at CPI plus 2% each year over the regulatory period.

For any new major trade waste customer arising throughout Water Plan 3 where the volume and quality charges are based on the long run marginal cost, the Major Trade Waste Service Charge will be calculated based on the limits within the major trade waste agreement.



APPENDIX K – Trade Waste Volume Discharge Factors

Code	Property Type Description	Sewage Volume Discharge Factor
AB	Abattoir/Knackery	95.00%
CW	Car/Truck Wash	95.00%
DY	Depot/Yards	95.00%
FP	Funeral Parlour	95.00%
HA	Hall	95.00%
HO	Hospital/Nursing Home	95.00%
HT	Hotel/Motel/Accommodation	95.00%
IC	Indoor Sports Centre	95.00%
LD	Laundry/Laundromat/Dry Cleaner	95.00%
ME	Mechanical Business	95.00%
MP	Milk Processing	95.00%
OS	Office/Retail Outlet	95.00%
PC	Public Conveniences	95.00%
PH	Printing/Photography processing	95.00%
RE	Restaurants/Cafes	95.00%
RFO	Retail/Wholesale food outlet/processing	95.00%
SA	Salon (Beauty, Hair etc)	95.00%
SGF	Sporting/Recreation Grounds WITH function rooms	95.00%
SU	Surgery	95.00%
TS	Manufacturing & Trade Services	95.00%
BD	Business & Dwelling	80.00%
CB	Concrete Batching Plant	80.00%
CH	Church	80.00%
ES	Emergency Services	80.00%
KG	Kindergarten/Day Care	80.00%
CP	Caravan Park/Camping Grounds	50.00%
HB	Hobby Farm	50.00%
SC	School	50.00%
SW	Swimming Pool	50.00%
WS	Water Sport Facilities	50.00%
CE	Cemetery	25.00%
CG	Commercial Gardens	25.00%
IW	Ice Works	25.00%
PO	Port Area	25.00%
SG	Sporting/Recreation Grounds (without function rooms)	25.00%
AC	Holiday Accommodation (Private)	0.00%
BC	Body Corporate	0.00%
BR	Boat Ramp	0.00%
DA	Dairy	0.00%
DW	Dwelling	0.00%
FA	Farm (not Dairy)	0.00%
HOR	Hobby Farm	0.00%
MH	Metered Hydrant Filling Point	0.00%
MS	Median Strip	0.00%
OTR	Other - Rural	0.00%
PG	Parks, Gardens & Reserves	0.00%
PS	Pump Station/Treatment Plant	0.00%
RB	Roundabout	0.00%
SP	Standpipe	0.00%
SPR	Stand Pipe (Rural)	0.00%
UFA	Unit/Flat/Apartment	0.00%
VL	Vacant Land	0.00%

NOTES



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