



# 2018-2023 Water Price Submission



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**Appendix 1 Service Standards**

**Appendix 2 Detailed Capital Program 2018-2023**

**Appendix 3 Major Capital Projects**

**Appendix 4 Detailed Urban Prices and Tariffs**

**Appendix 5 Detailed Rural Prices and Tariffs**

**Appendix 6 Community Engagement Undertaken**

**Appendix 7 Deliberative Panel Report**

**Appendix 8 Strategic Asset Management Plan**

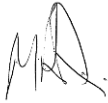
**Appendix 9 2018-2023 Water Pricing Proposal Development Strategy**

**Appendix 10 GWMWater 2017/18 Corporate Plan – Statement of Corporate Intent**



As at Wednesday 27 September 2017, the directors of GWMWater, having made such reasonable inquiries of management as we considered necessary (or having satisfied ourselves that we have no query), attest that, to the best of our knowledge, for the purpose of proposing prices for the Essential Services Commission's 2018 Water Price Review:

- information and documentation provided in the price submission and relied upon to support GWMWater's price submission is reasonably based, complete and accurate in all material respects;
- financial and demand forecasts are the business's best estimates, and supporting information is available to justify the assumptions and methodologies used; and
- the price submission satisfies the requirements of the 2018 Water Price Review Guidance paper issued by the Essential Services Commission in all material respects.



Mark Williams  
**Managing Director**



Peter Vogel  
**Chairman**





## 1. Executive Summary

The preparation for this 2018-2023 Price Submission commenced upon release of the 2013-2018 Water Pricing Determination.

The Price Submission outcomes have been grouped into the following themes;

- Safe and Clean Water,
- Reliable and Affordable Services, and
- A Healthy and Liveable Region.

### 1.1 Basis for the 2013-2018 Water Price Submission

The Office of Living Victoria (OLV) reset the baseline for the 2013-2018 Water Review in 2014 when it undertook the Water Industry Review.

Through the Water Industry Review, it was established that GWMWater had already set a high level of ambition in its 2013-2018 Water Price Submission. The GWMWater Board set a productivity hurdle of 2% for pricing purposes, this exceeded the 1% hurdle established by the ESC as a minimum for all water businesses. A further 2% productivity aspiration was set by the Board to bring the overall level of productivity target to 4%. The additional 2% would fund GWMWater's contribution to the pipeline and reduce its overall borrowing requirement.

The OLV process identified a 4.3% productivity opportunity and given its alignment to the Board aspiration, this was accepted as a price benefit that had already been embedded by virtue of the initial 2%. It was agreed with OLV that GWMWater would not provide a fairer water bills rebate.

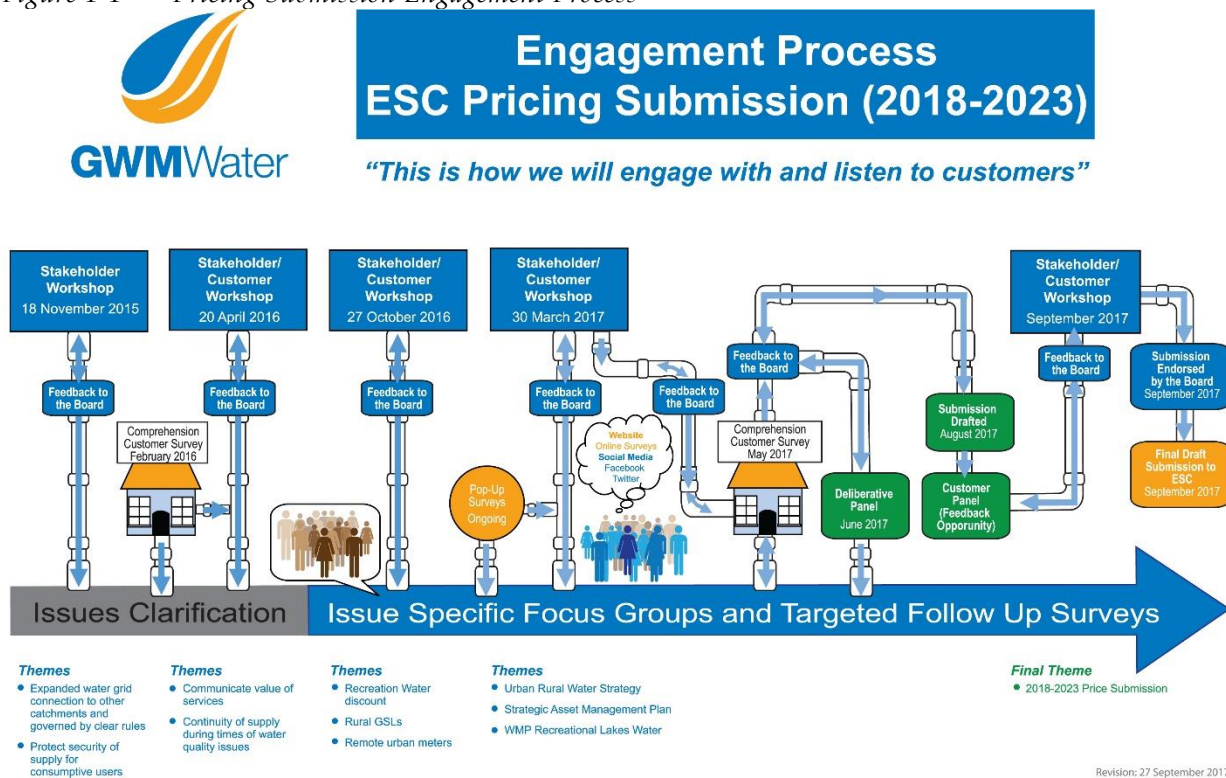
### 1.2 2018-2023 Water Price Submission Engagement Framework

Through various modalities of customer engagement, GWMWater has consulted on key issues specific to the water products and services provided. The feedback from the various forums was a way of establishing customer sentiment on issues that could be refined into a service offer.

Many issues specific to service levels and projects were topics considered at our biannual customer and stakeholder engagement forums. The issues specific to price and service identified in the GWMWater Regulatory Strategy were the subject of more detailed consideration by a Deliberative Panel and an overview of this is provided in Figure 1-1 below.

The Deliberative Panel was formed in early 2017 to provide opinion, advice and recommendations on the GWMWater price and service proposals for its 2018-2023 Price Submission.

Figure 1-1 Pricing Submission Engagement Process



### 1.3 2013-2018 Water Price Period Outcomes

During the 2013-2018 regulatory period, GWMWater has delivered on programs consistent with those identified in Water Plan 3. The water quality projects have been, or are in the process of being delivered, albeit sometimes with a more cost effective technical solution when considered on a lifecycle basis. With the exception of Quambatook, the water treatment projects are being delivered by connecting towns building pipeline connections to existing treatment facilities in neighbouring towns.

GWMWater has fulfilled its financial commitments to the Wimmera Mallee Pipeline with the delivery of projects that were considered to be consistent with the project objectives.

Lags have been experienced in delivery of some projects with priority being given to drought related projects in 2014/15 and 2015/16 with the most material project to lag into the 2018-2023 regulatory period being the Dimboola wastewater treatment plant upgrade.

Revenue has been consistent with the revenue cap that has been set across the regulatory period. The aspirational productivity and efficiency targets set by the Board and reaffirmed by OLV have been met.

### 1.4 2018-2023 Water Price Submission in Summary

The Wimmera Southern Mallee region is expected to achieve modest growth over the next five years. This growth will be restricted to Horsham and to a lesser extent Stawell and Ararat, whilst the rest of the region will be stable or in decline.

The Wimmera Mallee Pipeline did however carry with it the growth aspirations of the region and these are inherent in the growth water holdings in GWMWater's water entitlement. GWMWater maintains very ambitious targets for the sale of growth water. The main opportunities for the sale of this water relates to potential extensions of the rural pipeline network which present significant opportunities for growth water sales in intensive agricultural pursuits and these are an integral part of the business case(s) for rural pipeline extensions. Mineral sands development have not materialised as a result of depressed commodity prices and appear unlikely to proceed in the near future. Viticulture prospects are improving but this industry is exposed to currency movements to the extent wine is being produced for the export market. There are a number of niche horticulture opportunities emerging with the most significant being the Nectar Farms developments in Northern Grampians Shire.

The Deliberative Panel sought assurance about water security. In the context of this query, the findings of the Urban and Rural Water Strategy were presented to the Panel. The Panel was advised that in the context of the conclusions of Urban and Rural Water Strategy, the only potential vulnerabilities were in the East Grampians supply area and Edenhope and that any supply response may be considered in the context of the East Grampians Rural Pipeline Study and the West Wimmera Rural Pipeline Study respectively. The Panel also acknowledged that further work would be undertaken to better understand the potential impact of climate change and climate variability during the 2018-2023 regulatory period.

The Board has adopted a more moderate productivity and efficiency aspiration of 2.5% for the upcoming regulatory period. Given the extent of revenue risk, only 1.5% has been 'priced in'. With a stable transition to the 2018-2023 regulatory period, we continue to refine our operating model with appropriate utilisation of communications and technology advances. The improvements derived from these investments will deliver the productivity and efficiencies and translate to benefits to customers.

The improved maturity of our asset management systems and processes is better informing our asset renewal program as well as our operations and maintenance programming.

The proposed introduction of urban remote metering that will extend the application of the rural customer portal is cost neutral. In the context of the business case, the improving cost base of the technologies is likely to produce a cost benefit that will enhance the prospect of realising the 2.5% productivity target.

GMMWater adopted a Carbon Pledge that commits us to a 19% reduction in carbon emissions by 2025. As with urban remote metering, the improved efficacy of the technologies are more likely to produce a positive cost benefit. DELWP's advisors independently reviewed the basis of our commitment and they reaffirmed its cost benefit. GMMWater expects to derive some strategic advantage by virtue of our locality north of the divide with access to sun, wind and a lot of open space. The sites identified almost always have access to the electricity transmission and distribution network.

One of the topics considered by the Deliberative Panel was Guaranteed Service Levels (GSLs). The Deliberative Panel reinforced a view that GMMWater should achieve whatever service targets we say we are going to achieve. GMMWater interpreted this as support for GSLs as an appropriate mechanism for keeping service quality as a higher order objective.

For rural pipeline service where water quality was compromised, a GSL was not considered appropriate. The Panel reaffirmed the view that it was more important that supply be maintained with timely communication of any issues associated with water quality and in doing so leave it to the rural landowners to manage the risk.

The support for maintaining a supply to the homestead has translated to a defined water carting service to the rural homesteads during periods of interrupted supply that extend beyond 72 hours. This is to be 'codified' in the Rural Customer Charter.

The Panel expressed support for the continuation of the current suite of urban GSLs. The panel specifically recommended that GMMWater introduce a water quality GSL for customers who experience prolonged or frequent water quality excursions. This recommendation has been adopted and a GSL will be introduced for urban potable water quality excursions.

The interest in water quality was reaffirmed by the Deliberative Panel in its support for projects that will improve water quality in a number of towns. Some of the benefits that were to be attributed to urban customers are being applied to service upgrades as opposed to a reduction in customer bills.

GMMWater will improve water quality in Kaniva, Moyston and Ultima and subject to the outcome of further community consultation, Elmhurst. GMMWater will also work with West Wimmera Shire to address sanitation issues in Goroke by installing a Common Effluent Drainage System.

The Deliberative Panel considered the basis of tariff design. Whilst initially forming a view that a greater proportion of the tariff be applied to variable charges to provide greater customer empowerment, this was reversed when they considered the potential impact on customers in lower socio economic groups and the potential hardship this would cause. The panel formed a view that the proportion of fixed and variable should remain but with any future price movements 'skewed' towards increasing the variable part of the tariff over the course of the regulatory period.

A key initiative of the 2013 Water Price Review was the recreation contribution charge that is being applied to support subsidies to pipeline supplied recreation lakes, and discounts to sporting clubs. Strong community support remains for the retention of the recreation contribution charge and following consideration by the Deliberative Panel a view was formed that this should be extended to schools. The inclusion of schools will lift the value to \$18 and \$9 for concession cardholders. In the context of this and performance of the recreation water policy, GWMWater is seeking to lift the price of water supplied to recreation lakes from \$20 to \$25 per ML over the course of the regulatory period.

### 1.5 2018-2023 Price Submission PREMO Assessment

Whilst we believe that we have prepared a well-articulated submission, perhaps one of the biggest challenges GWMWater faces as a water business relates to its breadth and scope of activity.

As a vertically integrated water business, covering an area that is sparsely populated providing services to rural landowners, urban centres, the environment and the community our portfolio is significant. The challenge is to provide clarity to all customer segments of services provided and of the value that those services deliver.

The factors that lead us to downgrade our PREMO rating have been the assessment against Outcome and Risk where we have considered our submission advanced. The downgrade to advanced in Outcome is created by the 'noise' created by the myriad of services we provide. The relatively high proportion of fixed charges in the tariff structure influences the Risk rating of advanced. After tariff design, GWMWater has assumed a greater share of risk in most dimensions of the submission. The weighted average price cap is aimed at providing maximum flexibility in any refinement of tariffs in years 2-5 to consider the implications of the outcome of the current environmental water pricing review. In the Management area, we consider GWMWater to be leading and this is strongly influenced by the governing oversight of the price submission development combined with the robust models and tools used to support the development of the Price Submission. The GWMWater model of engagement has been enhanced during this regulatory period with the implementation of the Customer and Community Engagement Strategy in 2013 and for the purpose of the Price Submission, this has been rounded out by the formation of the Deliberative Panel.

Table 1-1 *PREMO Self-Assessment*

	Outcome	Management	Engagement	Risk	Total
Rating	Advanced	Leading	Leading	Advanced	Advanced
Score	3.25	3.75	4	3	14

## 1.6 2018-2023 Price Outcomes

The overall price paths being sought by GWMWater that expose the impact service upgrades will have are summarised in the following table.

*Table 1-2 Real Price Paths 2018-2023*

Line of Business	Real % increase/(decrease)			
	Year 1	Year 2	Year 3	Year 4-5
Urban Water	(0.9%)	0	0	0
Urban Wastewater	0.5%	0	0	0
Rural Pipeline	(0.1%)	0	0	0
Groundwater	0	0	0	0
Unregulated licences – surface water	0	0	0	0
Environment	10%	9%	0	0
Bulk Water	0	0	0	0
Recreation Lake Water	10%	10%	3.3%	0
Minor Trade Waste	0	0	0	0

## 2. Introduction

This is the fourth Price Submission prepared by GWMWater since independent price and service regulation of the water industry commenced in July 2004.

The 2018-2023 Water Price submission will be the first price submission where the Wimmera Mallee Pipeline (WMP) will not dominate the economic and business outlook of GWMWater.

The first price submission reflected the planning for the WMP and the extent of likely commitment to the project by GWMWater and the discussion between the ESC and the Minister for Water at the time focussed very much on the opening Regulatory Asset Base (RAB).

The second price submission was very much at the 'sharp end' with the funding model resolved relative to the contributions by the region as reflected in borrowings to be undertaken by GWMWater. These were to be recovered from price increases that were the subject of an affordability study developed collaboratively with GWMWater, Minister for Water and the Treasurer.

The third price submission focussed on the way GWMWater would fulfil its financial commitment to the project by utilising the 'unspent funds' from the WMP when agreement was reached with the Commonwealth to purchase the collective 28 GL of water held as part of the Wimmera Irrigations System.

Agreement was secured under the Irrigator Led Group Proposal (ILGP) with the Victorian and Commonwealth government for GWMWater to use the remaining unspent funds to;

- decommission the irrigation network,
- deliver the Rural Pipeline Intelligence Project,
- acknowledge the expenditure incurred securing water from the northern pipeline network,
- retrofit the Northern Mallee systems to the Wimmera Mallee, and
- assist in funding the peripheral pipeline extensions to the Wimmera Mallee pipeline.

In 2016/17, the Wimmera Mallee Pipeline Project was finally acquitted from a financial perspective. The project does however; continue to present challenges to GWMWater. The project was more than a water savings project with significant environmental outcomes arising from the water saved. The project carried the economic and social aspirations of the region with water saved for economic development and specific allocation of water for recreation purposes.

In moving forward, a significant part of the business model for GWMWater relates to the further sale of growth water for new industries in the region. Significant progress has been made in the realisation of the sale of growth water in the intervening period since the construction of the pipeline. The sale of growth water is a sale of an asset created by water savings and therefore any growth water sale reduces the Regulatory Asset Base (RAB) and in doing so reduces prices for all water customers.

The sale of growth water has more recently been achieved through extensions of the rural pipeline network to secure rural landowners potentially affected by climate change but more definitively affected by the millennium drought and the recent four-year drought 2011-2015. The most significant of these projects is the South West Loddon Project that will cover much of the Loddon Shire and the northern part of Northern Grampians Shire.

GWMWater services a number of small towns that receive a regulated water supply and/or do not have sewerage. In the context of this price submission, GWMWater has consulted directly with towns that are either requesting, worthy of, or needing a service upgrade. We have then consulted more broadly, as to whether the wider Wimmera Mallee community is prepared to support price increases for the benefit of these communities.

In the context of this submission, GWMWater has assessed community support for;

- the continuation of the Recreation Water policy implemented as part of the 2013 Water Price Review,
- the extension of the Rural Pipeline Intelligence Project to urban customers,
- the productivity expectation of GWMWater relative to its past performance,
- the basis of the carbon pledge that has been developed for GWMWater as part of the overall water industry response to climate change,
- the service standards being offered relative to past performance and industry benchmarks, and
- GWMWater's assessment of the level of ambition in its price submission.

GWMWater has consulted on these issues using its revised model of customer engagement the cornerstone of which has been the formation of a Deliberative Panel to assess community sentiment about price and service issues in the plan.

The GWMWater Board has had oversight of the production of this 2018-2023 Water Price Submission by adoption of a Regulatory Strategy, which it adopted in November 2016. A Pricing Submission Working Group of the Board has overseen the development of the Pricing Submission and elements within. The Working Group met prior to each Board meeting to provide guidance to management on issues specific to the development of the Pricing Submission as well as receiving updates from management on the guidance material issued by the Essential Services Commission (ESC).



This is the first submission prepared under the new ESC Performance, Risk, Engagement, Management and Output (PREMO) model. GWMWater applauds the ESC on the bold initiative to adopt PREMO, which challenges water businesses to ensure they are undertaking appropriate customer engagement, and in doing so demonstrating the value proposition in the water and wastewater services they provide.

### 3. GWMWater

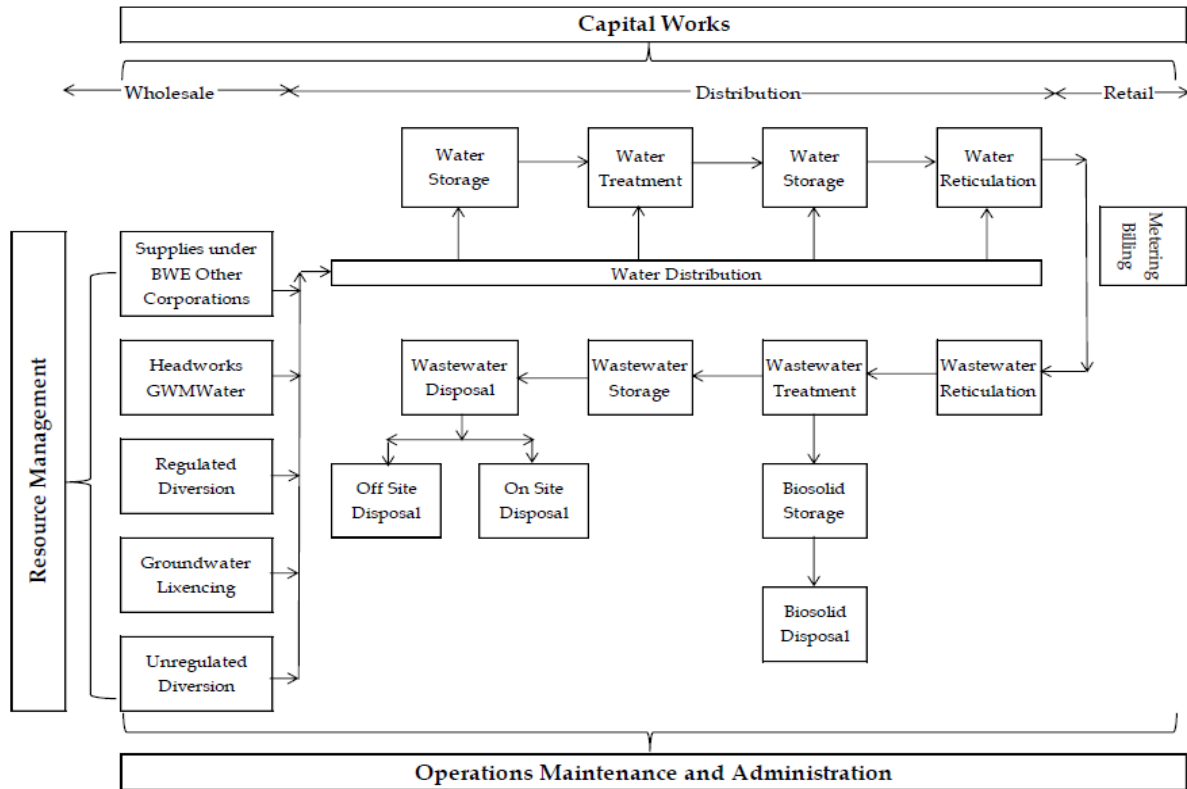
GWMWater is a Government Business Enterprise with the charter of providing water and wastewater services to an area covering approximately 60,000 square kilometres in Western Victoria.

Figure 3-1 GWMWater Operational Area as at September 2017



GWMWater is relatively unique in the context of water businesses in Victoria. We are the only vertically integrated water business that also has a substantial rural customer base that services a large number of urban centres many of which are quite small. Figure 3-2 below provides a good overview of the breadth of GWMWater activity.

Figure 3-2 Scope of GMMWater Activity



More recently, the environment has become a valued customer because of government co-investment in water efficiency and water recovery that has closed the gap on Sustainable Diversion Limits (SDLs) for the Wimmera Avoca basin under the Murray Darling Basin Plan.

### 3.1 Planning Context

We operate within a dynamic region in an environment that is very much weather dependant. By virtue of this, the community is very aware of water issues and as a result, we are closely connected to the communities we serve.

The potential impact of changed weather in the context of climate change and climate variability in our region is significant. To the extent, the weather patterns of the past two decades are indicative of climate change, and then this would indicate that we have already been experiencing the impact of climate change.

In 2010/11 we experienced three significant rainfall events that substantially improved the water resource holding of the region. In the five-year period that followed, we returned to a dry cycle with rainfall and inflow totals that were below average and amongst the lowest rainfall and inflow years on record. In 2016/17 we experienced a wetter season but in a historical sense, rainfall has only been marginally above average. These weather patterns are consistent with climate trends forecast by the scientific community under climate change and climate variability in our region.

The investments in water efficiency have mitigated the impact of climate change and ensured that we can continue to provide water and wastewater services that support regional growth and promote the liveability of our communities. Because of climate change, we anticipate an expansion of our water delivery networks as landowners that have typically relied on local catchment become more vulnerable.

Since completing the conversion of the stock and domestic channel network to a rural pipeline system, we have made significant advances in the sale of growth water and facilitated the buyout and closure of the irrigation sector in the region. We now have reliable water supplies in sufficient quantities to facilitate growth without compromising the water needs of the environment or existing water users.

We will continue our transformation to a sophisticated digital utility, focussed on achieving service excellence through the appropriate use of technology. This will be achieved in the context of an improved understanding of our customer needs and continued strong partnerships with stakeholders and suppliers.

Our commitment to innovation and continuous improvement will ensure that we realise the full potential of our people, technology and infrastructure to maximise the value of services provided to the communities we serve.

We balance environmental, financial and social obligations through smart, well-informed decisions and demonstrated regional leadership.

It is in this context that the Board reviewed its Strategic Directions and whilst some priorities were reshaped, the broad thrust of the strategy remains. The Vision and Mission have been constants over time and maintain their currency in the context of this 2018-2023 Water Price Submission with the projects and initiatives being consistent with the Vision and Mission.

### *Vision*

Sustainable water for regional growth, a healthy environment and vibrant communities.

### *Mission*

Providing innovative and affordable services through partnerships with stakeholders, customers and the community.

A more detailed commentary that provides context around the operation environment of GMMWater is covered in the Statement of Corporate Intent that is included in Appendix 10.

## 4. Water Plan 3 in Review

GWMWater acknowledges that a Price Submission provides a snapshot of the business outlook at a point in time. We also understand the importance of referentially checking from time to time to review the basis of assumptions and in doing so ensure there is a good understanding of how changes in the operating environment may affect the business and ensure any new plans are well informed.

### 4.1 Revenue

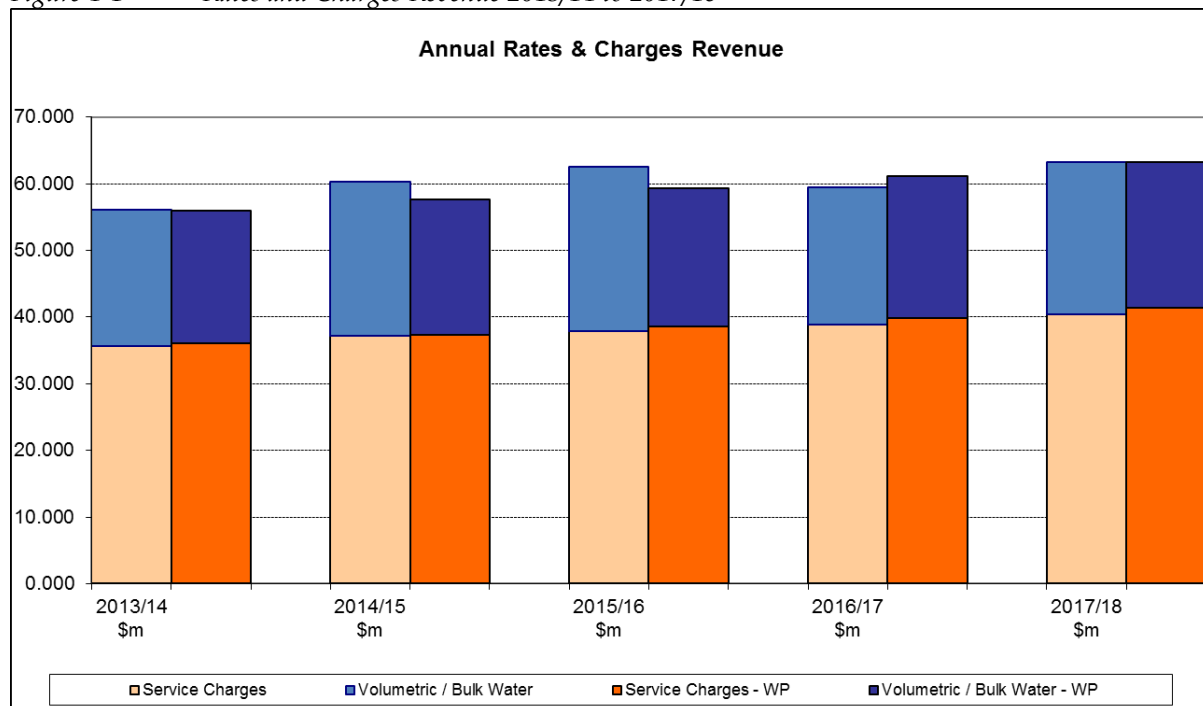
GWMWater has operated under a revenue cap arising from the 2013 Water Price Review.

#### 4.1.1. Rates and Charges Revenue

In the earlier years, revenue was strongly influenced by drought with consumption being significantly above average. The 2014/15 and 2015/16 years were extremely dry and as a result, water consumption was significantly above average. The 2016/17 year was a wetter year and there was a corresponding reduction in revenue. In addition, 2016/17 revenue was significantly influenced by the cessation of mining activity at Stawell Gold Mine which, ceased operation in December 2016 and this will also impact revenue in 2017/18.

Increased rates and charges revenue from growth has been generally in line with forecast over the planning period, variance of approximately 2% compared to original revenue estimates overall. Figure 4-1 below provides a summary of rates and charges revenue across the regulatory period.

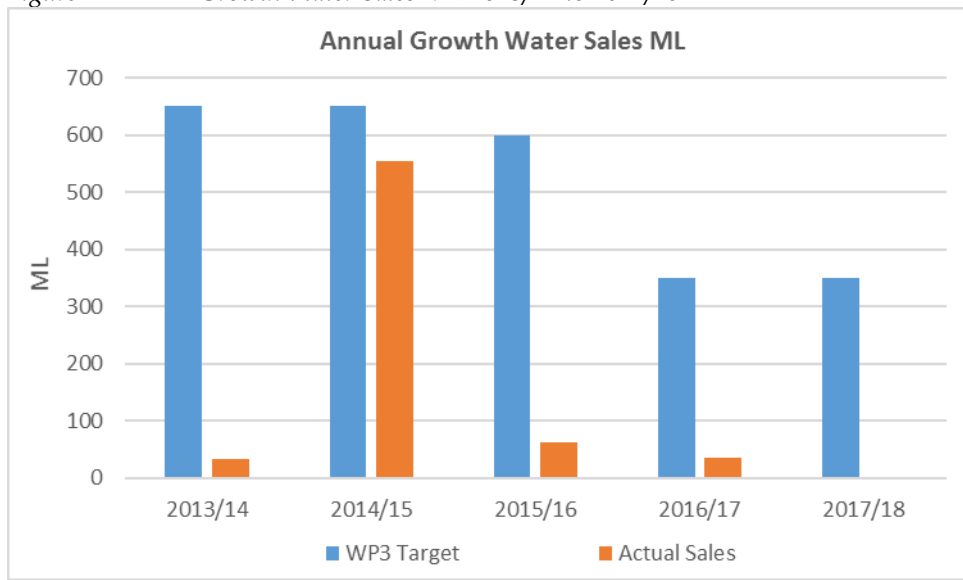
Figure 4-1 Rates and Charges Revenue 2013/14 to 2017/18



#### 4.1.2. Growth Water Sales

Despite an active marketing program, growth water sales targets established as part of the Growth Water Marketing Strategy for Water Plan 3 have not been fully realised. The lower level of sales realised has been offset largely by increased demands from existing customers. Figure 4-2 below provides a comparison of growth water sales targets reflected in Water Plan 3 compared to actual sales.

Figure 4-2 Growth Water Sales ML 2013/14 to 2017/18



#### 4.2 Capital Program

GWMWater has maintained a capital program that has been generally consistent with the program identified in the 2013-2018 Water Price Submission.

The principle source of variation has been the diversion through 2014/15 into 2015/16 into drought related projects that have delayed the delivery of projects in the core GWMWater capital program. The impact of drought extended to a formal acknowledgement in Water for Victoria about the impact of climate change and a formal commitment made to the South West Loddon Water Supply Scheme.

Figure 4-3 Capital Expenditure Program 2013/14 to 2017/18

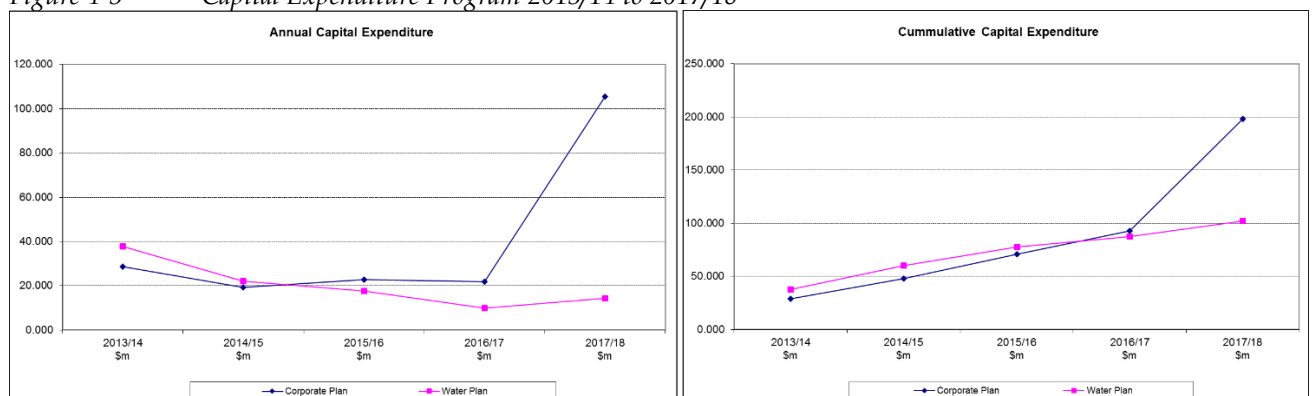


Table 4-1 Capital Program Water Plan 3 Reconciliation

	5 Year Corporate Plan \$'000	2013-2018 Water Plan \$'000	Variance \$'000
Expenditure	207,804	101,938	(105,866)
Revenue	(82,303)	(7,106)	75,197
<b>Net Capital Expenditure</b>	<b>125,501</b>	<b>94,832</b>	<b>(30,669)</b>
<i>Expenditure brought forward from Price Submission 4</i>			
WMPP Unspent Funds	-	1,850	1,850
Mt Cole Pipeline	-	900	900
<i>GWMWater Contributions Funded from Incremental Revenue (NCC Framework)</i>			
South West Loddon Rural Water Supply Project	(15,000)	-	15,000
Pella Rural Water Supply	(346)		346
Quambatook Rural Water Supply	(243)		243
Wartook Rural Water Supply	(150)		150
Coonooer Bridge Rural Water Supply	(123)		123
<i>Other Reconciling Items</i>			
Greener Government Buildings Energy Cost Savings (Recurrent)	(800)	-	800
<b>Net WP 3 Reconciliation</b>	<b>108,839</b>	<b>97,582</b>	<b>11,185</b>
Water Quality Upgrade Projects	-	11,221	(11,221)
<b>Adjusted Net WP 3 Reconciliation</b>	<b>108,839</b>	<b>108,803</b>	<b>(36)</b>

A Strategic Options assessment has been undertaken to assess life cycle outcomes of different Water Quality Upgrade options to deliver remaining Water Plan commitments. Towns to be upgraded include Sea Lake, Brim, Beulah and Woomelang. The option selected has resulted in increased capital expenditure however will result in lower ongoing operating expenditure and net present costs over the life of the investment. The impact of the change in investment mix has been separately identified in the table above.

### 4.3 Wimmera Mallee Pipeline

The Wimmera Mallee Pipeline has dominated the planning horizon of GWMWater since the introduction of independent price and service regulation in 2004. After GWMWater completed projects that fully expended the residual of GWMWater commitment to the Wimmera Mallee Pipeline Project, financial acquittal occurred in 2016/17.

The following table provides a summary of supplementary projects delivered with the residual funds.

Table 4-2 WMPP Supplementary Initiatives 2013-2017

<b>WMPP Unspent Funds Projects</b>	<b>Total Expenditure \$</b>
Wimmera Irrigation System Decommissioning Project	4,882,455
Rural Pipeline Intelligence Project	7,384,364
Fire Fighting Infrastructure Project	2,048,397
Landsborough Valley Water Supply Project	1,886,897
Walkers Lake Works	131,329
Bulk Water Purchase - Murray River Entitlement	4,600,000
Gateway 6 Review	48,263
Ouyen Recreational Lake Pipeline	763,260
Supply System 1 Nhill Upsizing	2,725,582
Dimboola WTP Water Security	386,156
Five Towns Drinking Water Supply Project - Murtoa Storage No.2	682,551
Jung Pressure Reducing Valve	227,121
Lake Marma Connection	18,000
Peripheral Development Pella	403,511
Peripheral Development Quambatook	414,479
Peripheral Development Wartook	150,425
Peripheral Development South West Loddon (Wedderburn Project)	583,519
South West Loddon Rural Water Supply (Stage 1 Construction)	2,300,961
Dunmunkle Flood Study	90,000
South West Loddon Rural Water Supply (Stage 2)	5,500,000
<b>Total Residual Expenditure</b>	<b>35,227,271</b>

GMMWater has been able to fulfil its commitment to the project by extending the value proposition to rural pipeline customers and the communities serviced by these pipelines.

#### 4.4 Operating Expenditure

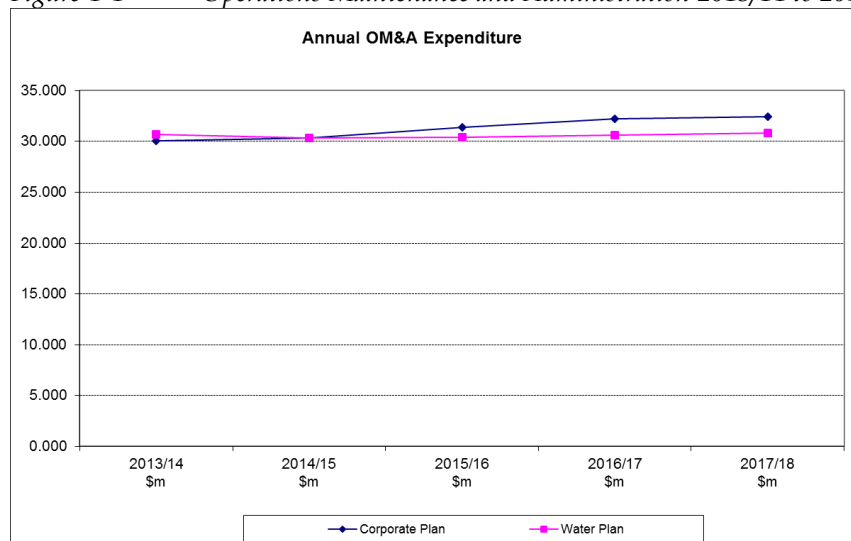
The 2013 Water Price Review was prepared in the context of a very ambitious productivity and efficiency target established by the Board of GMMWater.

The Board established a 4% productivity target with 2% of the productivity passed through to customers. The additional 2% to the extent it was achieved was set aside to retire borrowings that were integral to funding the GMMWater commitment to the Wimmera Mallee Pipeline.



A subsequent water industry productivity and efficiency review facilitated by OLV in 2013/14 was undertaken. Through this review, the work undertaken by independent consultants Deloitte identified a 4.3% productivity opportunity, which was adopted by GWMWater, but as we had already delivered a 2% productivity price benefit to customers, agreement was reached that the 2.3% could be delivered to its debt management strategy.

Figure 4-4 Operations Maintenance and Administration 2013/14 to 2017/18



The following table provides a reconciliation of performance against the Price Review targets and 2014 efficiency review.

Table 4-3 Reconciliation of Productivity Targets Water Plan 3

Operating Expenditure (Opex)	Water Plan 3					Total
	2014 Efficiency Review (ER)					
	2013/14	2014/15	2015/16	2016/17	2017/18	
Opex Baseline	32.6	31.7	31.6	31.2	30.6	157.7
(ESC Determination - \$ 2013-14)						
Water corporation Opex proposal adjusted	0	0.1	0.6	0.2	0.1	1.0
Additional expected savings	0	0.4	0.5	0.5	0.5	1.9
Co-ordinated Procurement Opex savings	-	0	0	0.1	0.1	0.2
<b>Target Opex level - ER (\$ 2013-14)</b>	<b>32.6</b>	<b>31.2</b>	<b>30.5</b>	<b>30.4</b>	<b>29.9</b>	<b>154.6</b>
<b>Target Opex level - ER (\$ nominal)</b>	<b>32.6</b>	<b>32.0</b>	<b>32.2</b>	<b>33.0</b>	<b>33.3</b>	<b>163.2</b>
<b>2018-2023 Price Submission</b>	<b>32.0</b>	<b>32.2</b>	<b>33.2</b>	<b>33.5</b>	<b>34.3</b>	<b>165.2</b>
Less Recurrent Funding	0.0	0.0	-0.1	-0.1		-0.1
Less Decommissioning Expenditure	-0.1	-0.1				-0.2
Less Opex impact from Capex brought forward		-0.2				-0.2
Less Grants and Other Transfers				-0.9		-0.9
<b>Adjusted 2018-2023 Price Submission</b>	<b>32.0</b>	<b>31.9</b>	<b>33.2</b>	<b>32.5</b>	<b>34.3</b>	<b>163.8</b>
Variance	-0.6	-0.2	1.0	-0.5	1.0	0.7

During 2015/16, GWMWater incurred significant additional cost associated with maintaining supply because of a Blue-green Algae event on the Murray River and constraints on our delivery infrastructure on the eastern side of our network.

In March 2016, a blue-green algae event on the Murray River prevailed for a period of 3 months. In order to maintain water quality GWMWater undertook extensive water carting to maintain a non-contaminated supply. This involved water carting to towns and rural homesteads that would have otherwise received contaminated water from the Murray River.

On our eastern network there had been significant commitments made on the system as a result of the Landsborough Valley project. Additional water was also committed to Stawell Gold mine in the same season. This coincided with what has possibly been the most extended dry period experienced in Western Victoria. In the absence of an early season break, GWMWater commenced a water-carting program in Stawell during March to ensure the town was secure for the Stawell Easter Gift.

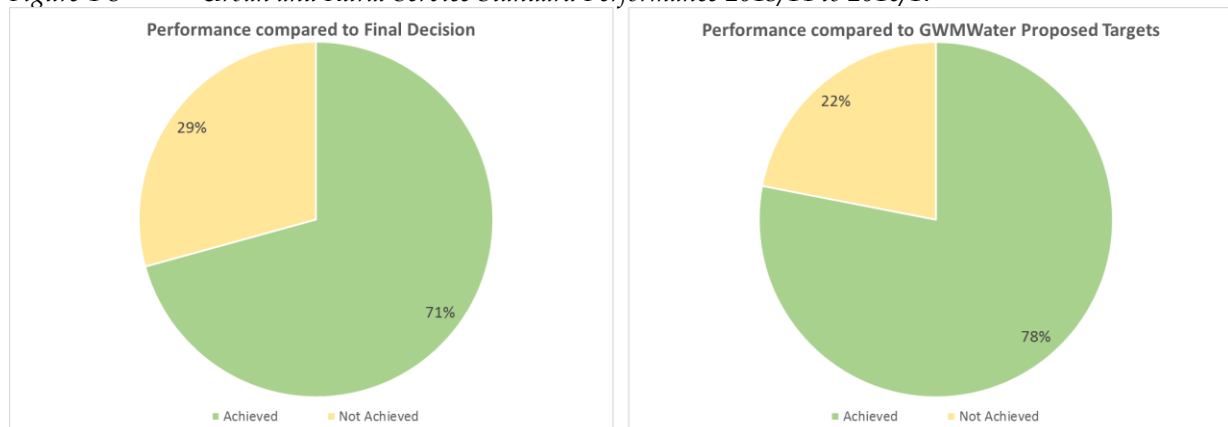
#### 4.5 Service Performance

GWMWater has well developed and efficient systems for the capture, management and reporting of service performance.

Overall service performance outcomes against service standards reflected in the rural and urban customer charters over the first four years of the regulatory period between 1 July 2013 and 30 June 2017 are summarised below.

Performance has been presented relative to the Final Decision and GWMWater’s 2013-2018 Water Plan proposal. The difference being seven ‘time based’ urban water and wastewater service targets which were adjusted in the Final Decision based on the previous five year average. GWMWater’s original proposal was based on achieving efficiency targets recognising the geographical challenges and time needed to be able to respond to site and source spare parts where required. With the improvement in data capture and reporting systems across the first four years, recent results reported provide a more reliable gauge of performance in comparison to Water Plan 2.

Figure 4-5 Urban and Rural Service Standard Performance 2013/14 to 2016/17



In comparison to proposed targets, exceptions have largely resulted from the impact of seasonal changes affecting the performance of reticulation assets. Aging urban infrastructure combined with soil movement from continuous wetting and drying has resulted in a higher number of breaks and blockages being experienced.

#### 4.6 Pricing and Tariff Outcomes

Price paths applied over the 2013-2018 period have been consistent with the Essential Services Commission 2013, *2013 Water Price Review Final Decision: GWMWater Determination*, June with the exception of the following:

Table 4-4 2013 Water Price Review Final Decision

Tariff and Price Component	Price \$ (1 July 2013)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
<b>Groundwater</b>					
Wimmera Annual Fixed charge	124.15	14.7%	9.0%	0.0%	0.0%
Murrayville WSPA (ML)	8.2617	-9.8%	-9.3%	0.0%	0.0%
All other areas (ML)	4.9918	19.3%	13.5%	0.0%	0.0%
<b>Rural Pipeline</b>					
Recreation Lake Water	20.00	0.0%	0.0%	0.0%	0.0%

Table 4-5 Actual Tariff Price Path Movement Applied

Tariff and Price Component	Price \$ (1 July 2013)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
<b>Groundwater</b>					
Wimmera Annual Fixed charge	124.15	10.0%	0%	0.0%	0.0%
Murrayville WSPA (ML)	8.2617	-9.8%	-26.3%	0.0%	0.0%
All other areas (ML)	4.9918	10.0%	0%	0.0%	0.0%
<b>Rural Pipeline</b>					
Recreation Lake Water (ML)	20.00	-2.93%	-1.33%	-1.31%	-2.13%

The blue shaded cells reflect lower price paths applied to Groundwater and Recreation Lake Water tariffs over the regulatory period.

In respect to Groundwater prices, following price increases of up to 19.4% and 10.0% in year 1 and 2, it was decided to hold Groundwater prices constant in real terms pending the outcome of the sale process to sell unallocated licence volume in the West Wimmera Groundwater Management Area (GMA). The groundwater licence volumes offered for sale through an Expression of Interest (EOI) process were 1,000ML in Gymbowen, 450ML in Ullswater and 180ML in the Edenhope zone.

Recreation Lake Water pricing was held constant in nominal terms across the regulatory period reflecting the basis of engagement on the recreation contribution charge through the development of Water Plan 3.

#### **4.7 Adjustments from Water Plan 3**

The price review template includes an adjustment to the baseline year for the South West Loddon Rural Water Supply Project and Mallee Towns Treated Water Supply Project (Brim, Beulah, Woomelang and Sea Lake). The inclusion of an adjustment for these projects adjusts forecast capital expenditure in 2017-18 from the 2013 price determination forecast applied in the template.

With the exception of South West Loddon Rural Water Supply Project and Mallee Towns Treated Water Supply Project adjusted in 2017-18 there are no other material variations that require an adjustment into the next pricing period.

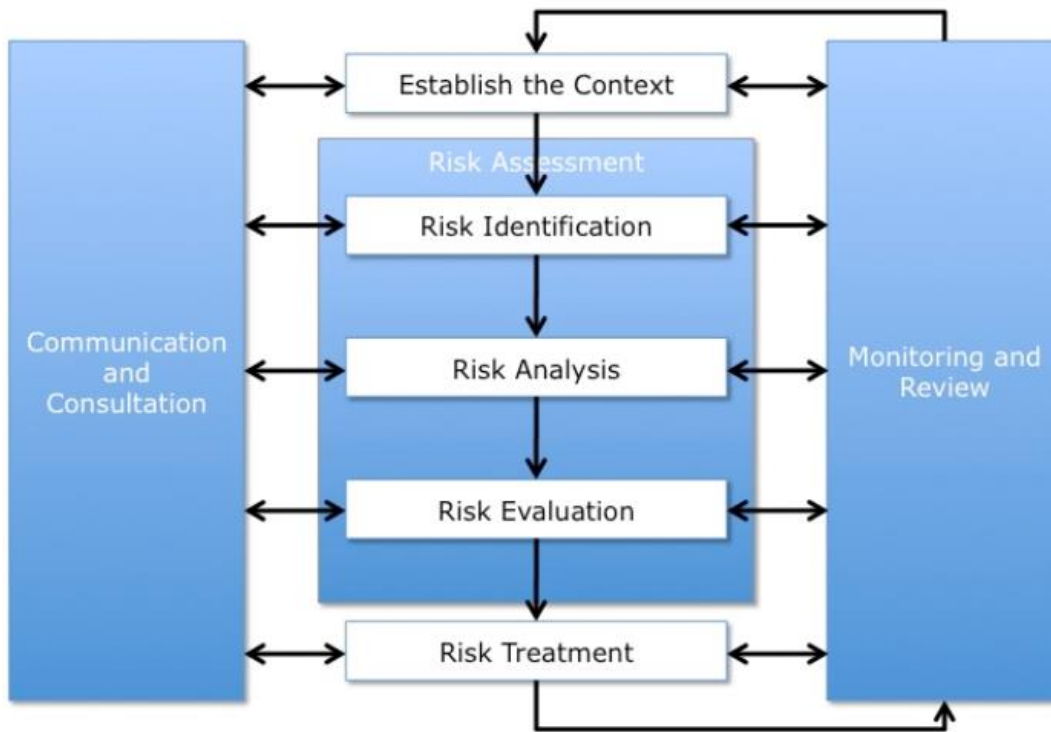
Variances in rates and charges revenue, growth water sales revenue and operating expenditure are largely offsetting and do not require adjustment.

## 5. Price Submission 2018 - 2023

### 5.1 Risk

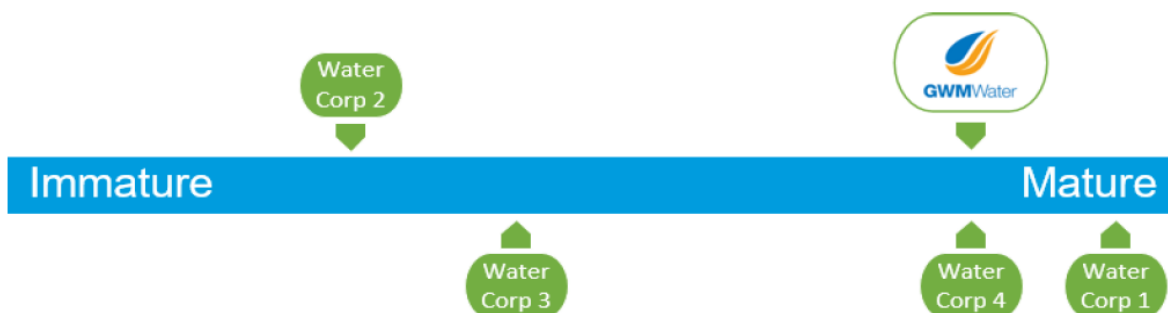
GWMWater has a risk management framework based on the International Standard for Risk Management ISO 31000 with the basis of the standard reflected in Figure 5-1.

Figure 5-1 Risk Management Framework



A recently completed internal audit of risk management at GWMWater assessed GWMWater as having a mature risk management model Figure 5-2. The report arising from the review assessed GWMWater level of maturity relative to other water businesses. GWMWater was considered to have a mature Risk Management Framework.

Figure 5-2 Risk Maturity



GWMWater has an enterprise wide risk management framework consisting of the:

- enterprise risk register consisting of 10 strategic risks,
- corporate register incorporating 80 business-as-usual risks,
- individual risk registers for larger/higher risk projects, and
- individual risk registers for water quality and occupational health and safety risks.

Each risk is reviewed on a frequency determined by its current rating, with treatment strategies identified and justified based on the organisations risk appetite. All very high rated risks escalated and reported to the Board monthly.

A risk workshop was conducted with the Board in February 2017 to review the strategic risk profile of GWMWater. The main risks identified were long-term water security in terms of climate, water quality and business continuity in the context of our increasing reliance on technology. This workshop is conducted annually to inform the development of the Strategic Plan and Corporate Plan and to ensure that resources assigned in the Plan achieve the maximum risk benefit.

The workshop focussed on activities that could prevent or enhance GWMWater's ability to meet its strategic directions.

The management of risk within GWMWater is heavily influenced by external factors. Regulatory, technological, economic, environment and social drivers shape a large part of the way risk is managed at GWMWater.

The dominant external factor facing GWMWater in the past decade has been short and long-term water supply security. As the water security issues evolved into the commitments for the Wimmera Mallee Pipeline construction, project management, finance and affordability risks dominated the risks facing the corporation.

Once the pipeline construction effort was completed, the shift in risk focus moved towards operational performance. This includes the ability to better manage water quality, as well as improved monitoring of water movement and delivery in the pipeline.

The financial risks in this 2013-2018 regulatory period have substantially abated with an improved credit rating post pipeline of BBB- to a credit rating under the Department of Treasury and Finance credit assessment framework of A-. Affordability risk however does remain high with GWMWater being amongst the highest priced water businesses in Victoria.

The management of operational risks, including the management of redundant channel infrastructure are receiving greater attention and are being enhanced by leveraging our investment in SCADA and the works management system.

The strategic risk profile of GWMWater has remained relatively stable over the past twelve months. Water quality remains the most significant risk with this being a culmination of many issues including the vagaries of source water quality in the north, the disparate number of water treatment facilities with differing technologies and challenges of an ageing reticulation system. After water quality, the only other strategic risk that remains outside the Board’s general risk appetite is Safety. Once again, with many factors influencing this the most significant risks that GWMWater seeks to mitigate in this area relates to underground services and excessive travel requirements.

Figure 5-3 Strategic Risk Heat Map – August 2017



- Risk 1 - Health and Safety
- Risk 2 - Water Quality
- Risk 3 - Water Security / Reliability
- Risk 4 - Financial Viability
- Risk 5 - Asset Performance
- Risk 6 - Business Interruption / Disaster Recovery
- Risk 7 - Delivery of Capital Works
- Risk 8 - Reputation Management
- Risk 9 - Culture
- Risk 10 - Non Compliance

More contextual commentary of the risk register is provided in detail in the Statement of Corporate Intent within the 2017/18 Corporate Plan which is provided in Appendix 10. The more specific issues of risk as it applies to elements of the pricing submission are represented more discretely in each section of this Pricing Submission.

## 5.2 Customer, Community and Stakeholder Engagement

GWMWater has a Vision where the community is integral to the overall business strategy. The GWMWater Vision of ‘Sustainable water for regional growth a healthy environment and vibrant communities’.

This is further reinforced in the Mission that outlines how we will achieve the Vision and this is by ‘providing innovative and affordable services through partnerships with stakeholders customers and the community’.

The GWMWater Customer and Stakeholder Engagement Model has been redesigned to reflect GWMWater’s changed model of operation. A key element of the new model of engagement was the adoption of the IAP2 Model of Public Sector Community Engagement. The IAP2 model outlines the whole spectrum of customer involvement with GWMWater tending to be more involved at the “involve and collaborate” levels of the IAP2 public participation spectrum. GWMWater has a genuine commitment to engagement in a community that is actively interested in water.

Figure 5-4 IAP2 Public Participation Spectrum



	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

The traditional model of Customer Committees played an important role under a channel supply situation where landowners were very much involved in the logistics of channel operation. With a fully reticulated supply the nature of this relationship changed significantly with water being supplied on demand.

### 5.2.1. Customer and Community Engagement Strategy

A focus since 2011 that was formalised in 2013 has been the objective of establishing a customer centric culture. A Customer and Community Engagement Strategy formalised the IAP2 Public Participation model that now underpins all communications strategies developed by GWMWater. The Customer and Community Engagement Strategy identified a number of other initiatives to improve its customer and community engagement. The emphasis of this change in direction is outlined in the Community Engagement Roadmap Figure 5-5.



Figure 5-5 Community Engagement Roadmap

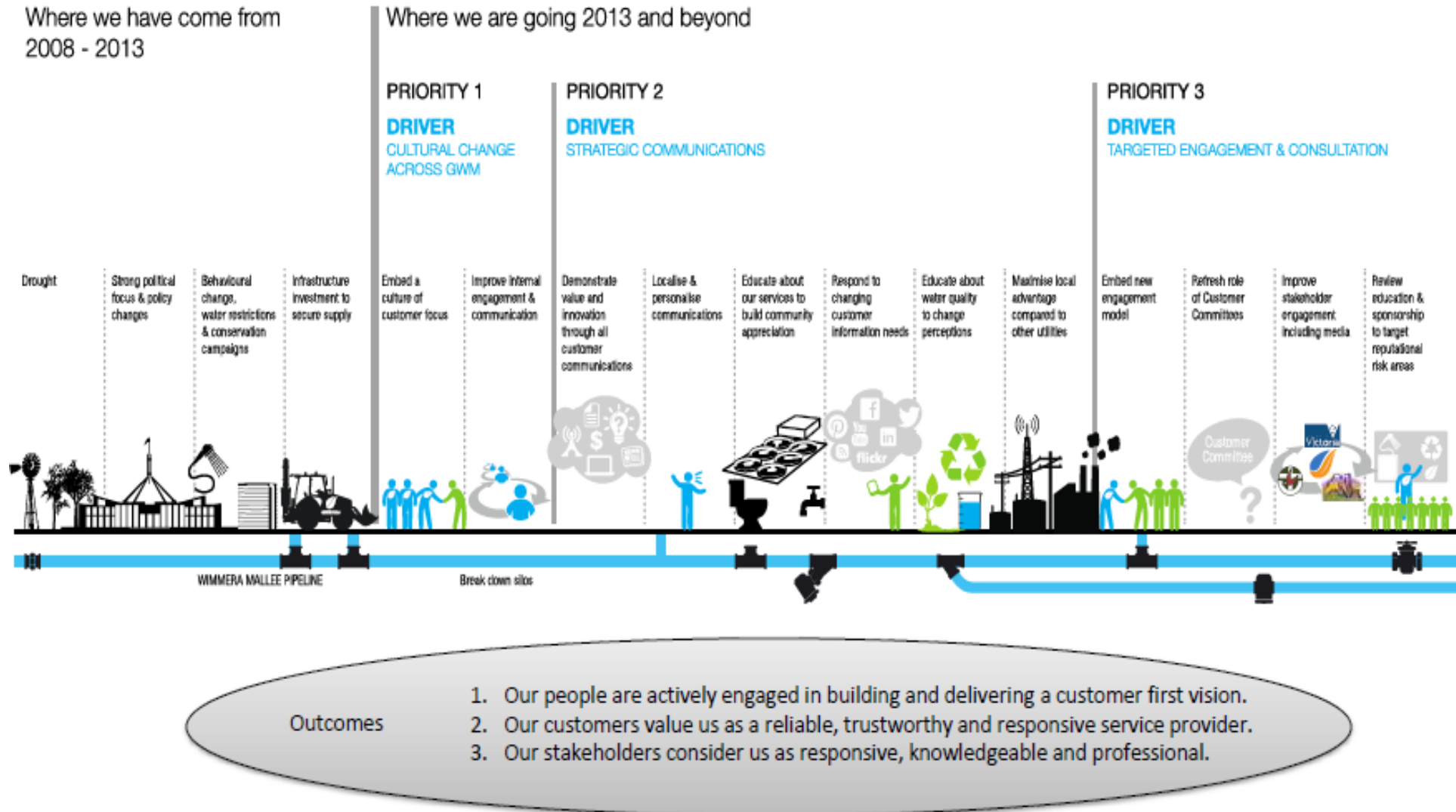
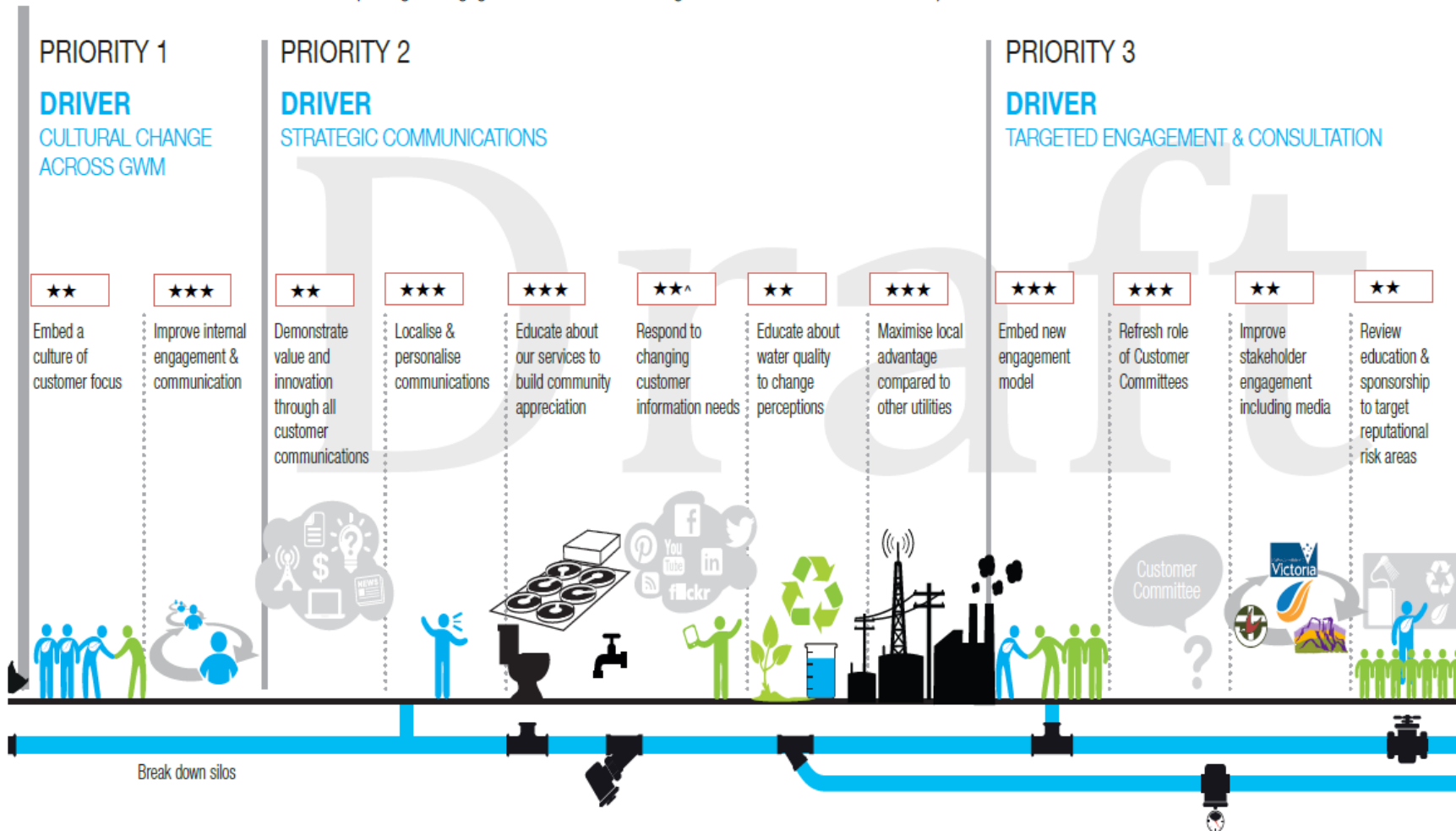


Figure 5-6 Community Engagement Roadmap Report Card

- ★★★ - Strong evidence of performance and supported by review participants
- ★★ - Evidence of progress, identified as area for continual enhancement
- ★ - Identified as area for focus in 2017

^ rating reflects identified need to adopt contemporary approach to communications. It should be noted GWMWater's digital metering and online portal are excellent examples of responding to changing customer needs and delivering real customer value in an innovative way.



The Customer and Community Engagement Strategy was reviewed in February 2017 and GWMWater’s progress and performance against the strategy was assessed. The February 2017 review provided a positive report card on the implementation of the 2013 Customer and Community Engagement Strategy. The opportunities for further improvement were in the communication methods and culture and the context of these opportunities are presented in Figure 5-6. These opportunities are reflected in an updated Customer and Community Engagement Strategy.

The effectiveness of the Customer and Community Engagement Strategy is evidenced by the results of the annual customer survey that was completed in February 2017. The survey results showed that over the past five years our favorability with our customers has improved significantly. The results of the most recent customer survey relative to our performance over the past five years as measured by the Net Promoter Score is set out Table 5-1 and Table 5-2 below.

Table 5-1 Net Promoter Assessment – 2014-2017

Overall Satisfaction	2017	2016	2014
Promoters (Score 9 or 10)	40%	34%	32%
Passives (Score 7 or 8)	40%	42%	35%
Detractors (Score 0 to 6)	17%	24%	30%

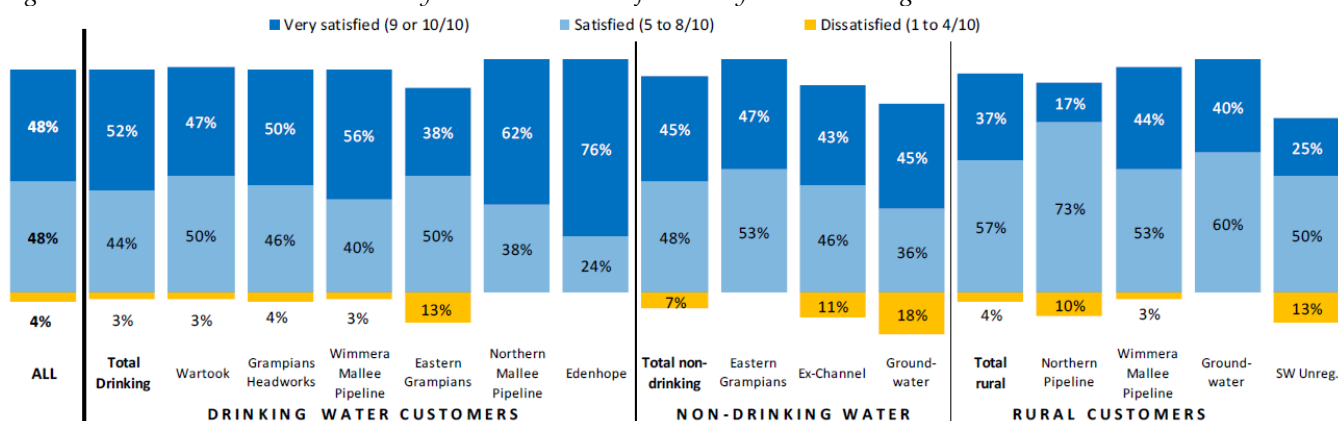
Table 5-2 Net Promoter Score – 2008-2017

Survey Year	2017	2016	2014	2012	2020	2008
NPS	23%	10%	2%	2%	3%	-2%
Urban Drinking Water	26%	11%	11%	N/A	N/A	N/A
Urban Non-Drinking water	9%	-8%	-7%	N/A	N/A	N/A
Rural Customers	17%	7%	-11%	N/A	N/A	-16%

N/A Not available in these Customer Surveys

The customer survey suggests that we need to improve our relationship with customers in towns with regulated (non-drinking) water and holders of unregulated surface water licences reflected in Figure 5-7. The attitudes of the rural northern pipeline reflect the trailing sentiments of customers arising from the supply issues we experienced in 2015/16 with blue green algae on the Murray River (rural Northern Mallee pipeline).

Figure 5-7 2017 Customer Survey – Customer Satisfaction by Customer Segment



The need for an improved customer culture identified in the original Customer and Community Engagement Strategy has given rise to a significant improvement in customer service. The internal engagement and communication processes and improved customer culture have significantly improved the customer service outcomes. GWMWater performance in customer relations as measured by Customer Service Benchmarking Australia (CSBA) has been consistently in the top ten in all sectors for the past four and a half years.

Table 5-3 CSBA Customer Service Rankings – Across All Industry Sectors

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2016/17	5	1	1	3
2015/16	2	1	7	2
2014/15	6	1	4	4
2013/14	8	7	6	5
2012/13		3	N/R	8

  Top Customer Service Performer – Water Industry Sector  
N/R No report issued for that quarter  
  Ranked outside of top 10 performers overall

### 5.2.2. Biannual Customer and Stakeholder Forums

The general Customer Committees have been replaced with biannual Customer and Stakeholder Forums. Past members of customer committees as well as key regional stakeholders are invited to participate in a facilitated process to discuss and seek feedback on a range of strategic and contemporary policy issues. Almost all issues covered have been aligned to topics that are shaping this price submission that the Board will need to endorse. Key regional stakeholders include representatives from the Victorian Farmers Federation, local government and the financial, education, health, power and telecommunications sector, as well as relevant government departments to participate in these workshops.

Beyond the biannual Customer and Stakeholder workshops, GWMWater retains a number of ‘special purpose’ Committees and Forums to assist in the development of strategy and policy and then monitor the performance of these strategies and policies. The following is the current list of Committees and Forums that GWMWater has in place to guide strategy and policy:

- Wimmera Glenelg Bulk Entitlement Executive and Council Forum,
- Irrigation Diverters Consultative Committee,
- West Wimmera Groundwater Management Area Implementation Committee,
- Murrayville Groundwater Management Area Implementation Committee,
- Regional Recreational Water Users Group,
- South West Loddon Project Steering Committee,
- East Grampians Rural Pipeline Study Steering Committee,
- West Wimmera Rural Pipeline Study Steering Committee,
- Rocklands to Taylors Lake Water Efficiency Steering Committee,
- Drought Reference Committee.#

# The Drought Reference Committee has been placed into recess since 2010.

GWMWater also consults directly with individual communities when considering specific water quality or wastewater improvement initiatives. Committees are also formed from time to time by expressions of interest to assist with the development of recreation management plans for GWMWater reservoirs.

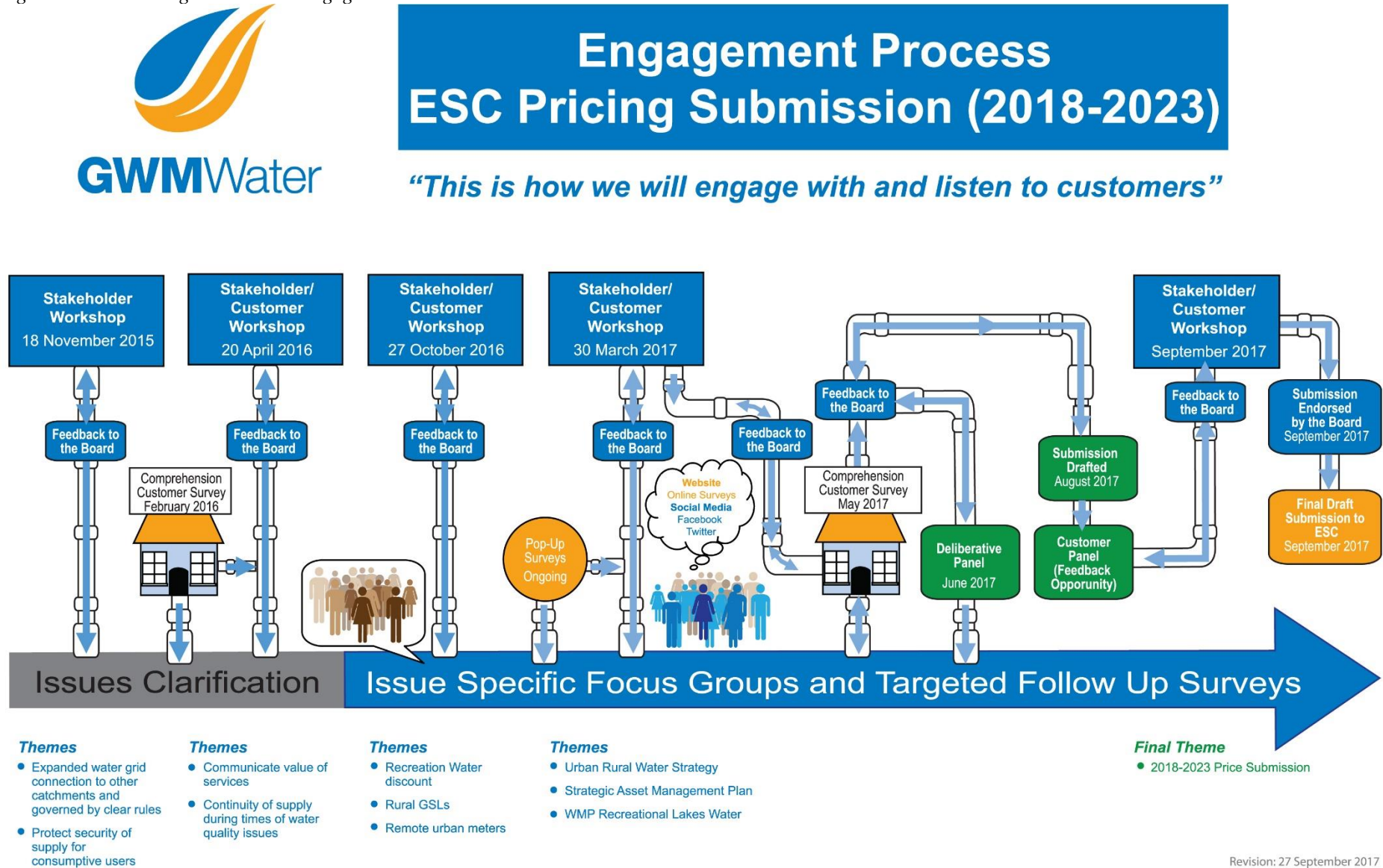
The GWMWater Website has been upgraded to provide a more contemporary look and feel. The website has been social media enabled to make it easier for our customers and followers to promote GWMWater messages. This compliments the significant advances that have been made with the establishment of the Storage Manager website and the Rural Metering Customer Portal.

### 5.2.3. *Deliberative Panel*

For the Pricing Review GWMWater established a Deliberative Panel to enable a smaller group of diverse customers to exercise judgement on the GWMWater Pricing Submission. Loosely based on the model of the Scottish Water Commission, the Deliberative Panel has been established as a citizen's jury. With the exception of the Chair, the target for the panel was to be a broad cross-section of the community both geographically and demographically. The Panel met on four separate occasions to consider the more topical issues associated with the Pricing Submission before deliberating on the overall price outcomes for the pricing submission. The Deliberative Panel was provided papers covering topics that were the subject of presentations at their forums.

The Deliberative Panel presented to the September 2017 Customer and Stakeholder Workshop and formally reported to the GWMWater Board on its deliberations at the September 2017 Board meeting.

Figure 5-8 Pricing Submission Engagement Process



Revision: 27 September 2017

#### 5.2.4. *Local Government Engagement*

In parallel with the consultative processes above, there has been an ongoing engagement process with local government since January 2017 with briefings provided to all municipalities over the eight-month period. The engagement process with local government is a specific acknowledgement that local government in many ways is a conduit to the communities we serve.

GWMWater covers 13 municipalities with seven of these being covered in their entirety and further six having a minor footprint in the municipality. The 2018-2023 Price Submission featured prominently in these Council Briefings with the implications of Water for Victoria also being the subject of discussion.

In many cases, the 2016 Council elections gave rise to significant changes in representation. In some cases this has come with revised expectations about services provided to different communities. In all cases, correspondence was provided to Council about issues raised at briefings and reminding them of the opportunity to participate in the broader engagement processes of the 2018-2023 Pricing Submission.

### 5.3 **Regulatory Period**

GWMWater considers the five-year planning period appropriate as the timeframe for establishing price paths for the period covered by this 2018-2023 Price Submission.

GWMWater has not identified any risks that have not been adequately addressed in the context of this Price Submission that would justify any shortening of the regulatory period. Conversely, any lengthening of the regulatory period would only be contemplated when we return to a more stable operating environment.

#### **GWMWater Proposal**

GWMWater will adopt a five-year regulatory period for the purpose of this 2018 Water Price Review

### 5.4 **Outcomes**

The GWMWater Board adopted a 2018-2023 Water Pricing Proposal Development Strategy in November 2016, which identified key issues to be considered in the development of the 2018-2023 Water Price Submission.

The issues raised have been the subject of further development and where appropriate engagement with customers and stakeholders. The key issues and concepts have been grouped into three outcome themes of Safe and Clean Water, Reliable and Affordable Services and a Healthy and Liveable Region.

#### 5.4.1. *Safe and Clean Water*

An overarching objective of GWMWater that is also an expectation of the *Safe Drinking Water Act 2003* is to provide drinking water to all customers.

By virtue of the investments and commitments that have been made to date, 93% of the urban population serviced by GMMWater receive water that meets the requirements of the drinking water regulations under the *Safe Drinking Water Act 2003*. At the end of the next regulatory period, this will increase to 95%.

Water quality is the most significant risk for GMMWater and much of this relates to the extent towns receive a regulated water supply. Where towns receive a regulated water supply, GMMWater has a risk management framework to ensure the water will not be mistakenly used as drinking water. This involves an annual notification program, communication on the quarterly bill and town signage. There is no obligation or expectation that rural customers will receive a potable water supply.

The inherent risk in relation to the quality of the source water also significantly influences the dominance of water quality on the GMMWater risk register. The Grampians catchment is protected and therefore provides good source water quality.

Groundwater quality used as a source of urban water supply varies around the district. The main issue with groundwater in the region is that it has elevated levels of dissolved salts and other minerals.

The Murray River as a water source is highly variable and in recent years the extent of this was evidenced by a prolonged blue-green algae event and a black water event. Murray River water quality variability is only likely to become more pronounced under climate change. The Murray River is a Category 4 source water under the Health Based Treatment (HBT) Target framework.

The East Grampians system is supplied from a combination of diversions from the upper Mt William Creek supplemented by bore supply in summer, thus providing variable water quality. Source water quality will influence the risk-based criteria that will impact on the priority of any water quality upgrades. Regulated water supplies sourced from the Grampians will generally be a lesser priority from a water supply upgrade unless they are major towns where other risk factors are likely to dominate.

The multitude of water treatment facilities that also apply different technologies further compound the water quality risk. In recent times, almost all water quality upgrades have been delivered by connecting the town to be upgraded to the nearest town with a water treatment plant of suitable capacity. This is achieved in the context of the GMMWater Integrated Water Cycle Management framework where sporting precincts and green areas in towns are isolated from the potable water network and provided a supplementary supply of raw water, recycled water and/or reclaimed water and in doing so shaving peak summer demands.


The GMMWater risk management approach to assessing towns for water supply upgrades applies a combination of population, source water quality, school locality, health service locality, transient population (major highway and/or tourist destination) and community want as factors that will influence priority. Using this criterion GMMWater has identified Kaniva, Moyston, Ultima and Elmhurst as priority towns for receiving water quality upgrades.



The Deliberative Panel was of the view that GWMWater should go further with water quality upgrades.

Figure 5-9 Outcome – Safe and Clean Water

Outcome - Safe and Clean Water



We will provide customers with safe and clean water that meets service standards and is fit for purpose.

Targets		Outcome indicator and measures:
Overall Customer Satisfaction	> 90%	1. Compliance with Safe Drinking Water Act
Urban customers receiving a drinking water supply (currently 93%)	95%	2. Number of customers receiving Drinking water
Total Quality Complaints (per 1,000 customers)	4	3. Customer satisfaction with the overall service
Compliance with Safe Drinking Water Act	100%	4. Total quality complaints for both urban and rural water supplies
Guaranteed Service Level		Rationale:
Notification to customer advising drinking water not suitable for drinking	\$100	Meeting customer expectations will reflect in overall customer satisfaction.
<b>Inputs:</b>		<b>Deliverables:</b>
New Drinking Water Towns	\$9.98 M	Drinking water supply provided to Kaniva, Moyston, Ultima and Elmhurst.
Water Treatment Plant Upgrades	\$2.85 M	Major upgrades at Manangatang, Ouyen, Underbool Water Treatment Plants.
Water Treatment Plant Asset Renewals	\$4.21 M	Ongoing renewal and maintenance of Water Treatments Plants.

[www.gwmwater.org.au](http://www.gwmwater.org.au)

#### 5.4.2. Reliable and Affordable Services

The provision of reliable and affordable services is a key objective of GWMWater. GWMWater is mindful of its position relative to other water businesses and the financial capacity of its customers when it comes to customer affordability. It is for this reason that GWMWater places such importance on the achievement of productivity and efficiency. Even more important is that this is achieved without any diminution of service. Where service levels are not met GWMWater remains committed to GSL's and the extent of these have been extended to urban water quality performance.

A key initiative in the 2018-2023 Water Price Submission is the introduction of urban remote metering accompanied by the customer portal. Not only will this improve the efficiency of GWMWater but will improve the customers' ability to track water use.

GWMWater acknowledge that despite all the above, vulnerable customers will remain and will maintain hardship programs to support customer in need.

Figure 5-10 Outcome – Reliable and Affordable Services

Outcome - Reliable and Affordable Services



<i>We will provide services and products that are reliable, affordable and valued by our customers.</i>		<b>Outcome indicator and measures:</b>	
		<ol style="list-style-type: none"> <li>1. Providing services and products that meet agreed service standards</li> <li>2. Achieving productivity improvements to improve affordability</li> <li>3. Extending the Customer Portal to urban customers to assist all customers to manage and monitor their water supply</li> <li>4. Supporting vulnerable customers</li> <li>5. Being accountable for services through Guaranteed Service Levels</li> </ol>	
<b>Targets:</b>		<b>Rationale:</b>	
Annual Service Standard Performance Report – Targets met		Service standards listed in our Urban Customer Charter and Rural Customer Charter will be reported on our website. Monitoring will be improved to measure performance against all standards. Previous performance measured against approved standards is currently 71%. Achievement of 1.5% per annum productivity improvement as reflected in the total operating expenditure target. Monitoring and improving access to support for customers experiencing difficulties paying.	
<ul style="list-style-type: none"> <li>• Urban Customer Charter</li> <li>• Rural Customer Charter</li> </ul>	> 80%		
Total Operating Expenditure (5 Year)	\$165M		
Hardship assistance provided	No.		
<b>Guaranteed Service Levels</b>			
<b>Urban Water</b>		<b>Sewer</b>	
Unplanned water supply interruptions to be restored within five (5) hours of notification.	\$50	Interruptions to sewer supply to be restored within five (5) hours of notification.	\$50
Planned water supply interruption longer than notification.	\$50	Sewer spills within a house that are a result of failure in our system, to be contained within one hour of notification.	\$1,000
<b>Other</b>			
Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours to contact the customer and provide information about help that is available if the customer is experiencing difficulties paying.			\$300
<b>Inputs:</b>		<b>Deliverables:</b>	
Total operations cost (5 year)	\$165M	Extension of remote metering and Customer Portal to urban customers.	
Total asset renewal expenditure	\$59M	Targeted maintenance and asset renewal program to maintain service levels. Supporting vulnerable customers under our Hardship program.	


[www.gwmwater.org.au](http://www.gwmwater.org.au)

#### 5.4.3. Healthy and Liveable Region

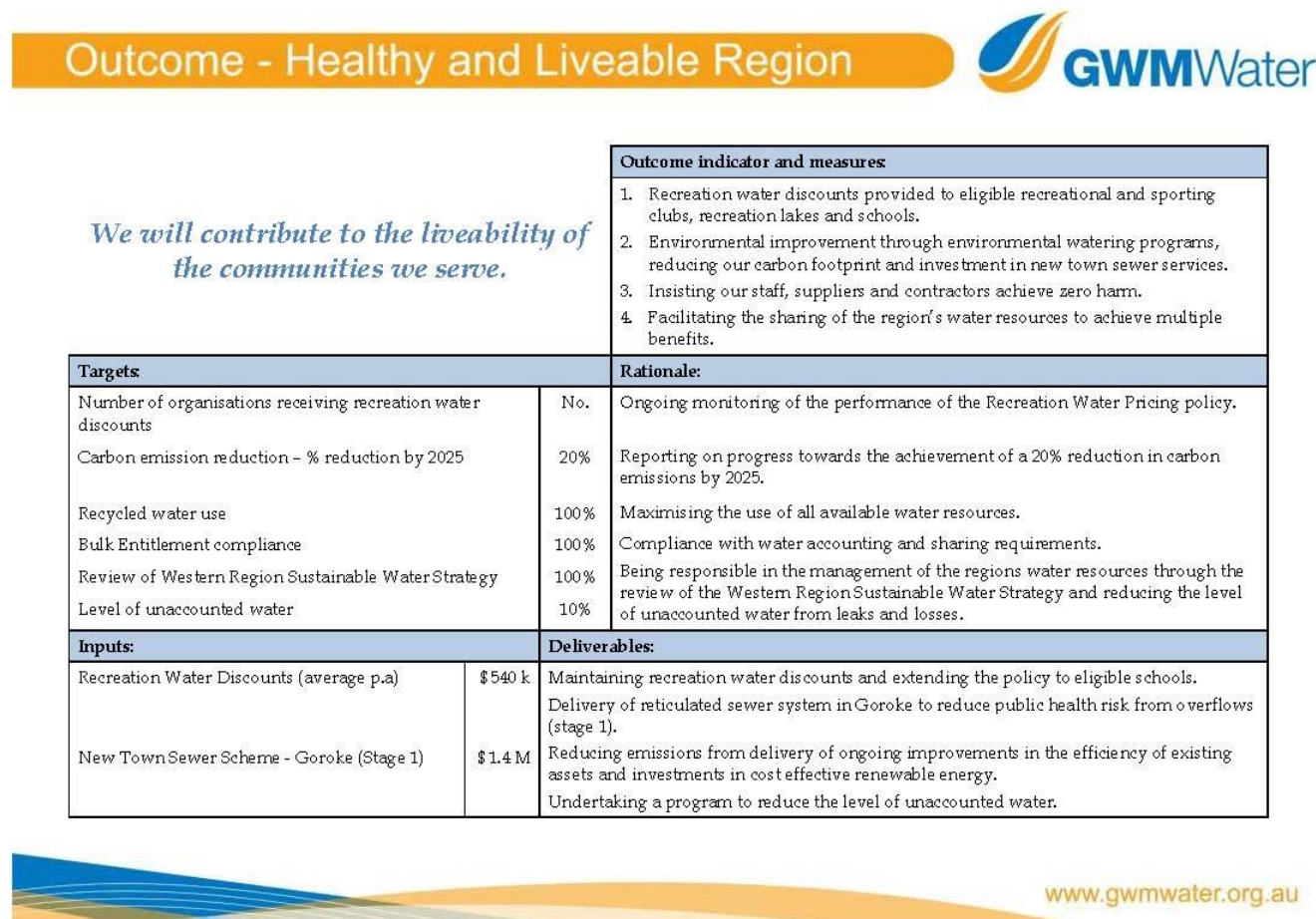
As the driest and warmest part of the state, GWMWater recognises the importance of water in maintaining the social fabric of the community.

GWMWater is proposing to continue with the collection of the recreation contribution charge (RCC). In the 2018-2023 period, the RCC will once again be applied to support the discounting of water supplied to sporting clubs and the subsidy of water supplied to recreation lakes. It is also proposed to extend the application of the RCC to schools for watering of grounds.

As the Storage Operator and Resource Manager, we will continue to support the environmental watering activities of the VEWH, CEWH and the Catchment Management Authorities. This will be done to ensure the Wimmera Southern Mallee region has the best opportunity to achieve multiple benefits with its environmental watering program.

The environment of Goroke will be enhanced by the introduction of a communal collection system for septic waste from the greywater and septic systems in town.

Figure 5-11 Outcome – Healthy and Liveable Region



#### 5.4.4. Service Level Key performance Indicators

Whilst the more significant outcome ‘metrics’ have been identified above, the service levels and the performance metrics to support them have been reviewed and reset. No diminution of service is being proposed. By virtue of GWMWater’s improvements in the quality and recording and reporting of regulatory data, we are better placed moving into this regulatory period as to our true performance in relation to the suite of regulatory key performance indicators. In the 2016/17 regulatory audit, GWMWater scored an A1 for 111 of the 124 metrics under review. Of the 13 measures that were not rated A1, ten were A2, and two measures were A4 and one measure A5.

In the 2013-2018 Price Submission GWMWater proposed to realign service standards but these were disallowed. Whilst we knew this was reflective of the service level we could achieve relative to the resourcing, the grading of the data quality did not provide a robust basis to challenge the service standard. The performance of GWMWater in this 2013-2018 regulatory period has been tracked relative to what GWMWater proposed and this is reported in Section 4.5.

Service standards being proposed for the period 2018-2023 are included in Appendix 1.

**GWMWater Proposal**

GWMWater is not proposing any diminution of service for service standards that form the basis of the standards for services provided as outlined in Appendix 1. Some service targets are being realigned to current performance and definitions where the quality of data as assessed by regulatory auditors has improved since the 2013 Water Price Review.

**5.5 Guaranteed Service Levels**

GWMWater is committed to maintaining standards of service that are important to customers.

Guaranteed Service Levels (GSLs) are a mechanism whereby GWMWater will provide a financial rebate on bills to customers who receive services that do not meet agreed levels. The consultative and engagement processes of the Deliberative Panel reaffirmed support for GSL’s as an incentive for water businesses to ensure the quality standard is maintained.

In the 2013 Water Price Review, GWMWater introduced its first GSL Scheme and the standards identified were adopted following a consultative process with our customers. The GSL’s that were adopted in the 2013-2018 review reflected the important dimensions of service to customers and are outlined in Table 5-4.

Table 5-4 2013-2018 Guaranteed Service Levels

<b>Guaranteed Service Level – Urban customers only</b>	<b>Rebate</b>
<b>Water</b>	
Unplanned water supply interruptions to be restored within five (5) hours of notification.	\$50
Planned water supply interruption longer than notification.	\$50
<b>Sewer</b>	
Interruptions to sewer supply to be restored within five (5) hours of notification.	\$50
Sewer spills within a house that are a result of failure in our system, to be contained within one hour of notification.	\$1,000
<b>Other</b>	
Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours (as defined by the Essential Services Commission) to contact the customer and provide information about help that is available if the customer is experiencing difficulties paying.	\$300

The incidence of GSL’s over time is represented in Table 5-5 with much of the incidence being associated with works and/or interruptions to power supply. This has lead GWMWater to review its planning for works and ensure better redundancy around power supply.

Table 5-5 Actual GSL's 2013/14 – 2016/17

	2013/14		2014/15		2015/16		2016/17	
	No	\$	No	\$	No	\$	No	\$
Water 5 hour	726	36,300	10	500	543	27,150	87	4,350
Planned Duration	144	7,200	0	0	125	6,250	103	5,150
Sewer 5 hour	3	150	2	100	8	400	11	550
Sewer Spill	1	1,000	0	0	0	0	0	0
Restriction	0	0	0	0	1	300	0	0

### 5.5.1. 2018-2023 Guaranteed Service Levels

The dimensions of performance that are considered important have been the subject of further engagement in the development of this 2018-2023 Pricing Submission. The consultation involved both urban and rural customers in all dimensions of service.

#### Urban GSLs

The Deliberative Panel considered urban GSLs and general support was provided for the current suite of GSLs.

The comments made by the panel suggest that GMMWater be accountable for their performance only reinforce the support for the GSL's. The GSL is an incentive mechanism for water businesses to ensure they perform in areas that are considered important service parameters.

There was debate within the Deliberative Panel as to whether there should be a water quality performance parameter for GSLs. The 2011 floods and water quality excursions informed the context of this discussion.

The Deliberative Panel acknowledged the impact of the excursions and encouraged GMMWater to consider the introduction of a water quality based GSL. The Deliberative Panel concluded there would be merit in establishing a GSL scheme for excursions on water quality. GMMWater's electronic metering solution will only measure flow at the customer point and the installation of any more sophisticated metering at this stage would be cost prohibitive.

In order to implement the desire of the Deliberative Panel a GSL for water quality has been developed that provides a rebate for any instances where GMMWater issue an advice not to drink the water or to boil the water with the value of the GSL being \$100.

#### **GMMWater Proposal**

The GSL regime for urban customers be maintained into the 2018-2023 and that the rebate levels be maintained.

A water quality GSL will be implemented that provides a \$100 rebate where the water does not meet the regulations of the *Safe Drinking Water Act 2003*.

### Rural GSLs

The vagaries of source water to the rural stock and domestic service were exposed by the water quality events on the Murray River that were experienced in 2016. A blue-green algae event in late summer/autumn was followed up with a black water event in winter of the same year. The rural customer charter does not warrant water quality but infers it would be fit for purpose.

When elevated blue-green algae was encountered on 6 March 2016, GWMWater ceased supply to rural customers and introduced water restrictions to urban customers supplied from the Murray River. For rural customers, this was supported by a commitment to maintain a carted water service to the homestead. Following the initial decision to cease supply to affected customers, GWMWater initiated a design feature to reverse pump. As rural landowners are required to be able to endure a 72 hour interruption the decision to cease supply should not have caused much inconvenience.

The cessation of supply did however expose the extent that rural landowners had invested in storage infrastructure to cover any potential interruption. The extent that GWMWater did not meet its 72 hour service obligation was able to be determined by referencing the time the meters were not recording from the time the system was shut off to the time the reverse pumping started to take effect.

A targeted communications strategy was implemented involving communication by social media and text messaging. A public forum facilitated by the VFF was held in Sea Lake on 15 March 2016 and this forum enabled us to get some guidance from customers on water quality. The overall sentiment was for GWMWater to maintain supply, inform customers of water quality issues, and let the customers manage the risk. Customers also valued having a carted water supply to the homestead under these circumstances. The incident also enabled us to collect more mobile phone numbers to allow us to communicate directly with customers for the duration of the event.

Through the consultative processes of the biannual Customer and Stakeholder workshops and the Deliberative Panel, consideration has been given to whether GWMWater should introduce a GSL for either water quality or service. Any concept of a rural GSL was rejected, but with a firm view that GWMWater should ensure they have infrastructure, systems, people and processes to meet their service obligation. The Deliberative Panel effectively rejected the concept of a Rural water quality GSL as it was considered that events like the blue-green algae and black water events are outside the control of GWMWater.

### **GWMWater Proposal**

That water quality not be included as a parameter for GSLs for rural water supply. GWMWater will 'codify' water carting to homesteads as part of its standard service offer to rural customers in the rural customer charter where service interruption extends beyond 72 hours.

GWMWater will continue to enhance its rural customer portal to provide better information on the rural water service being provided.

## **5.6 Urban Customer Charter and Rural Customer Charter**

GWMWater's customer charters are to be updated to incorporate customer feedback on standards and conditions of service and supply.

Proposed amendments to the Rural Customer Charter include:

- Clause 8.1 – [addition] GWMWater will maintain a supply during water quality incidents, unless unsafe to do so, and notify customers directly by SMS (where contact details available), on our website and social media pages, or through local media.
- Clause 8.4 – [addition] Where a Rural Pipeline Supply interruption exceeds 72 hours, GWMWater will cart non-potable water to the homestead at no cost to the customer. Water carting required within the first 72 hours of the interruption or for stock or other purposes is the responsibility of the customer at their cost.
- Clause 10.2 – [new] Customer Portal  
GWMWater will make available a Customer Portal to Rural Pipeline customers to assist them with monitoring and managing their water use at no cost to the customer.

Proposed amendments to the Urban Customer Charter include the addition of a GSL for water quality excursions.

## **5.7 Demand**

The demand projections of this 2018-2023 Price Submission have been prepared in the context of Victoria in Future 2016 (VIF2016) population projections. These projections formed the basis of the GWMWater Urban and Rural Water Strategy. The demand projections also incorporate the growth water sales objectives.

### *5.7.1. GWMWater Urban and Rural Water Strategy 2017*

GWMWater has prepared an Urban and Rural Water Strategy to assess long-term water demands, taking into consideration factors, which could influence demand and available supply, and possible measures to ensure water supplies meet future customer needs.

The Urban and Rural Water Strategy concludes there are no supply constraints that will affect our ability to meet water demand for the duration of the regulatory period. All anticipated consumptive demand will be met across the regulatory period. It does however acknowledge

some constraints on the Eastern Grampians system and on the Edenhope bore supply that will also be considered as part of the Eastern Grampians and West Wimmera Studies.

The strategy also acknowledges the need to undertake further studies to assess the potential impact of climate change and increased climate variability. These studies are programmed to be undertaken in the term of the 2018-2023 Price Submission.

**GWMWater Proposal**

The Urban and Rural Water Strategy does not give rise to augmentation requirements for increased water supply capability.

Some augmentation may occur in the East Grampians system and West Wimmera as part of a broader rural pipeline scheme in the event that these projects have proven business cases to stakeholders interested in these projects.

*5.7.2. Growth Water Marketing Strategy*

The Growth Water Marketing Strategy is an internal document that is aimed at identifying the opportunities and industries in the region that will require significant quantities of water.

Initially developed in 2013 and refreshed in 2016, the Growth Water Marketing Strategy focuses on the likely developments in the region. In the context of the opportunities, the most significant is the intensive agriculture sector, viticulture has had a resurgence in recent times, and niche horticulture is emerging whilst the mining interests of the region are floundering. The targets of the Growth Water Marketing Strategy are ambitious and reflect the GWMWater desire to commit the growth water as soon as possible.

**GWMWater Proposal**

The 2018-2023 Water Price Submission will commit to the targets established by the GWMWater Growth Water Marketing Strategy.

*5.7.3. Urban Demand Forecasts*

GWMWater operates in a region of relatively low growth with urban growth restricted to Horsham and to a lesser extent the towns of Ararat and Stawell in the context of the municipalities of Ararat Rural City Council and Northern Grampians Shire Council. All other towns, excluding municipalities where GWMWater only have partial coverage, are stable or in rates of population decline across the region.

Urban revenue estimates are prepared on the basis of locality/town and classifications including residential, non-residential and concessional. Growth assumptions for each locality are based on the projections of Victoria in Future 2016 (VIF2016).

In the five years between 30 June 2016 and 30 June 2021 across the 13 municipalities covered by GWMWater service area, VIF2016 projects a decrease of (0.6%) in Occupied Private Dwellings (OPD) and an increase of 2.4% in Structural Private Dwellings (SPD). Projections in the



subsequent five years to 30 June 2026 predict a further (0.5%) decrease in OPD and 2.1% increase in SPD.

Over the past four years the number of assessments have consistently increased between 0.4-0.5% p.a. The growth assumptions applied in the price submission over the 10 years is provided in table 5-6. The outcome of the assumptions is an overall increase of 0.5% p.a. which is consistent with VIF2016.

Table 5-6 Growth Assumptions

Local Government Authority	% Change Per Annum
Horsham Rural City Council	1.15%
Ararat Rural City Council	0.50%
Pyrenees Shire*	0.50%
Northern Grampians Shire	0.40%
Southern Grampians Shire*	0.33%
Loddon Shire*	0.26%
Gannawarra Shire*	0.10%
Yarriambiack Shire	0.10%
Hindmarsh Shire	0.10%
Buloke Shire	0.00%
Mildura Rural City - Rural*	0.00%
Swan Hill Rural City - Rural*	0.00%
West Wimmera Shire	0.00%

\*Majority of municipality outside GWMWater boundary

#### 5.7.4. Urban Residential Demand

The housing stock of the region is predominantly low density but in the larger towns, there is an increasing number of medium density homes. With this, there is a corresponding reduction in average persons per household across the region.

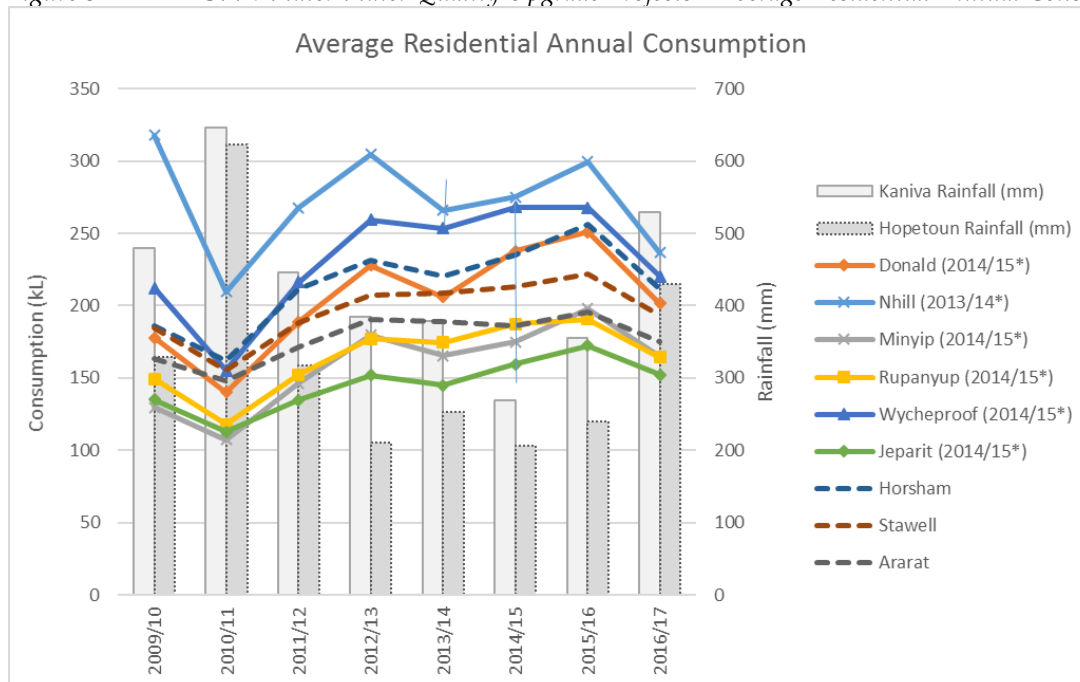
During the millennium drought, a significant amount of local harvesting capability was installed ostensibly to meet outdoor watering requirements given the level water restrictions in force at the time. The demands of the period since 2010/11 provide a more realistic basis for forecasting demand as a period that was free of water restriction. During this period, residential consumption did not return to pre-millennium drought levels. This however is in part influenced by changed behaviours but also influenced by the price given the uplift in price that coincided with the increased security.

In the absence of any significant increase in water price across the period, consumption is not expected to change significantly unless influenced by any decline in overall household disposable income. With anticipated increases in domestic energy prices household disposable income may be adversely impacted. Energy price paths and their impact on household disposable income are unknown and in the absence of any better information, GWMWater will assume any risk of reduced consumption arising from any overall reduction in household disposable income.

Based on feedback from our customer consultative processes, we do not intend to change the proportion of fixed and variable charge in the water tariff. This provides a stable price environment upon which to predict consumption. The only significant price increases will be in towns that have been identified to receive a water supply upgrade.

Towns that receive a water supply upgrade have a price uplift to transition the town to the potable water tariff. GWMWater has reviewed average residential customer demands in towns recently converted to a drinking water supply and referenced a study by Sydney Water on the price elasticity of water demand. Recent experience for GWMWater indicates an initial correlation between price and demand where there is a greater price uplift, however varying seasonal conditions and water quality tend to have a greater impact on consumption. Where these towns have been receiving a water supply that has elevated salinity a reduction in average consumption is expected as water with lower saline levels is more effective in irrigation activities.

Figure 5-12 GWMWater Water Quality Upgrade Projects - Average Residential Annual Consumption 2009–2017



Note: \* Year converted to drinking water tariff.

Urban assessment projections incorporate changes in tariffs resulting from capital works projects in the year following the programmed completion of capital works. The areas of capital expenditure which impact on demands include water quality improvement projects and new town sewer scheme projects.

Figure 5-13 Forecast urban water assessment demand 2018/19 to 2027/28

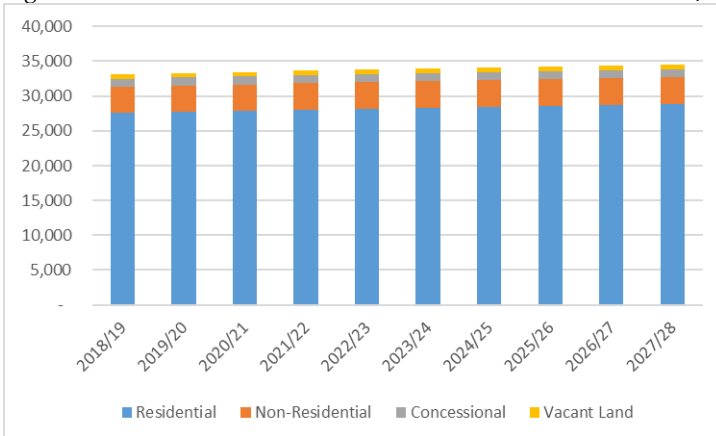


Figure 5-14 Forecast wastewater assessment demand 2018/19 to 2027/28

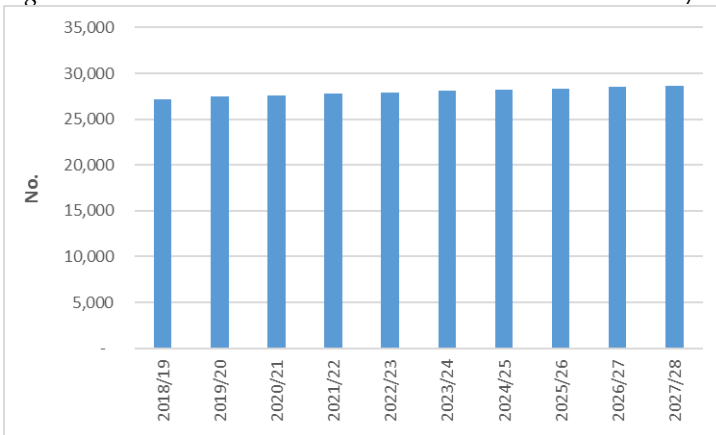
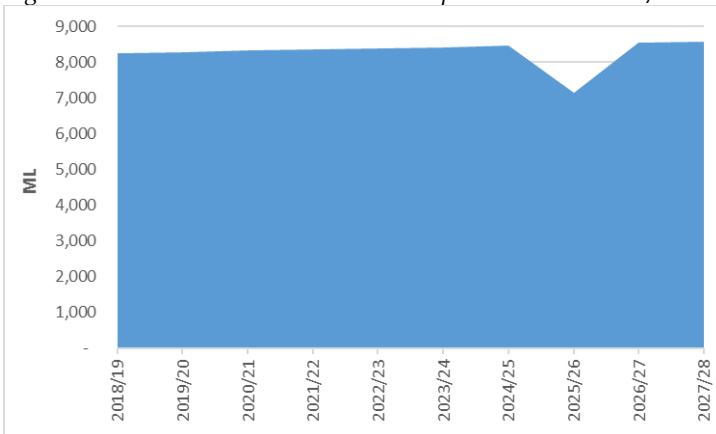


Figure 5-15 Forecast water consumption demand 2013/14 to 2022/23



Forecast water consumption beyond the regulatory period of the submission includes an assumption of a 1 in 5 wet or restriction year.

**GWMWater Proposal**

GWMWater will assume the risk of any reduced consumption arising from potential external impacts on household disposable income and price elasticity for the four towns that are to be upgraded to a potable water supply.

Projections assume 100% water allocation with permanent water saving measures.

Urban growth assumptions are consistent with VIF2016.

*5.7.5. Non-Residential Demand*

To the extent that there are growth opportunities arising from water being available these have been articulated in the GWMWater Growth Water Marketing Strategy.

Stawell Gold mine ceased operation in December 2016. The closure came about from a combination of declining productivity of its underground mining operation and an inability to obtain the necessary planning approvals to develop the proposed Big Hill open cut mine in Stawell.

*5.7.6. Rural Demand*

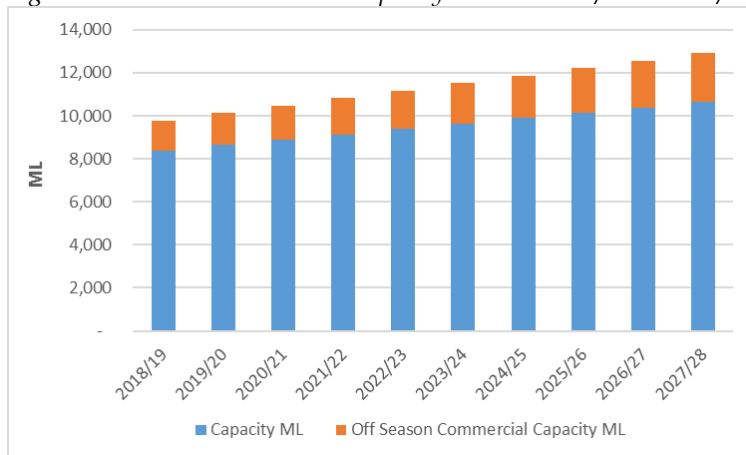
Within Water for Victoria, there is an acknowledgement that climate change is affecting weather patterns in Victoria. It is acknowledged, based on the science, that the potential impact in this part of the state is extreme from both a temperature and rainfall perspective.

Water for Victoria also has a chapter Water for Agriculture and within this chapter there is an acknowledgement that traditional mixed farming operations can achieve enhanced productivity by having access to a reticulated pipeline system and has identified areas that have historically had reliable local catchment as priority areas for assessment. There is a commitment to the South West Loddon system as well as funding for studies in the East Grampians and West Wimmera area.

Rural demand projections assume the intensity of water use (ML/ha) and the mix of farming enterprises will remain at existing levels. It is assumed that the allocation of growth water will progressively increase to 100% of peak and off peak growth water volumes over the next ten years.

The sale of growth water and the associated trailing revenue stream have been an integral part of the funding strategy for the Wimmera Mallee Pipeline. The ambitious targets of the Growth Water Marketing Strategy have been reflected in additional demand.

Figure 5-16 Forecast rural capacity demand 2018/19 to 2027/28



**GWMWater Proposal**

GWMWater rural growth and demand will be consistent with the Growth Water Marketing Strategy with the assumption that water consumption is lagged by one year.

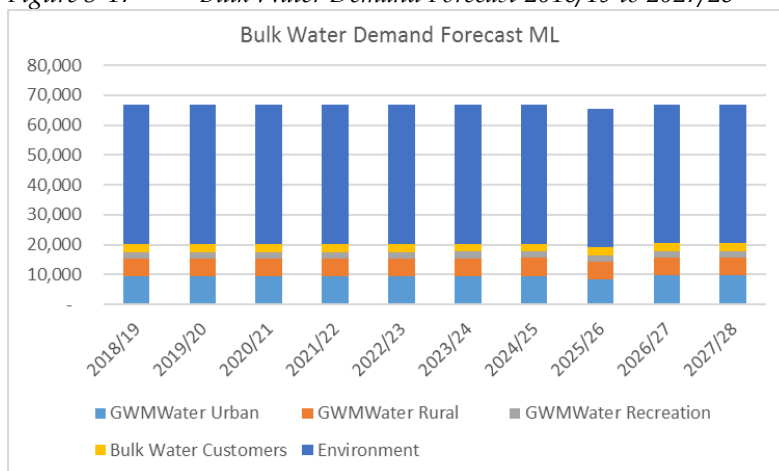
5.7.7. Bulk Water Demands (including Headworks)

Collectively the mines hold 12 GL of water and it is assumed that there will be some revenue lost from either mine.

Both Iluka and Donald Mineral Sands have significant water holding but neither have any active mining activity in the region. Iluka has ceased operation of their mine at Douglas and Mockinya but have retained the Douglas site as a disposal facility for the Hamilton processing plant. Donald Mineral Sands has not been able to provide a definitive timetable for commencing any mine operations.

The following figure 5-17 shows bulk water demand forecasts assumed in the Bulk Water Pricing Review.

Figure 5-17 Bulk Water Demand Forecast 2018/19 to 2027/28



**GWMWater Proposal**

Bulk water demand forecast will be consistent with the assumptions of the Bulk Water Pricing Review.

*5.7.8. Recreation Water Deliveries*

By virtue of the lesser reliability of this water product, it is assumed that across the regulatory period the average allocation would be 80%. It has been assumed that transfers from the GWMWater consumptive water product will meet any recreation water shortfall whilst there remains sufficient capacity in its Growth Water holding.

**GWMWater Proposal**

To the extent that water allocation and subsequent delivery falls short of volumes to meet sustainability of the recreation lakes, GWMWater will continue to underwrite supply until the issues of recreation water product reliability are addressed.

*5.7.9. Environmental Water Deliveries*

There is no reliable basis for forecasting environmental water demand. Unless affordability issues come in to play it is assumed in the long term, the Commonwealth Environmental Water holder will use 50% of their water allocation.

## 5.8 Forecast Operating Expenditure

The recurrent expenditure program is free of any major influences of restricted supply and will therefore be a normal operating response to demands on the system.

As foreshadowed in Section 5.5, GWMWater does not anticipate any significant increase in growth across the regulatory period other than that which is inherent in the Growth Water Marketing Strategy. The new services associated with South West Loddon will require additional support as will the provision of sewerage to Goroke.

Apart from the specific growth arising from the above, modest growth will be experienced in Horsham, Stawell and Ararat.

Forward projections also include incremental operating expenditure arising from the Mallee Town Water Quality Upgrades that will be completed in 2017/18 and the water quality upgrades in Kaniva, Ultima, Moyston and Elmhurst.

Perhaps the greatest uncertainty in the upcoming regulatory period will be energy prices, this also possibly presents the greatest opportunity. Being north of the Great Dividing Range and already having many points of connection to the electricity grid creates opportunity for renewable technology. With substantial improvements in the efficacy of renewable technology, these are likely to not only satisfy the commitments made to the carbon pledge but also derive ongoing efficiency by either avoiding consumption and in many cases transmitting power back into the grid.

Significant advances have been made in the utility of the asset management system to derive the development of the operations and maintenance budgets in relation to planned activities.

### 5.8.1. *GWMWater Cost Structure*

GWMWater has a well-established system for the costing of direct and indirect costs against different business segments and the planning of activities. The methodology for allocation of direct and indirect costs is outlined in the internal Corporate Cost Allocation Framework.

The framework notes that in the first instance, all revenue and expenditure should be 'directly' costed to the relevant line of business to which it relates. Only 'indirect' costs which are generally associated with corporate activities are allocated under the framework.

The current framework was documented to ensure compliance with the economic regulatory environment. The framework and allocation percentages are reviewed annually with the preparation of the regulatory accounts.

The allocation of costs has been enhanced since 2013 with the introduction of an electronic work order system. The work order system is part of the enterprise resource planning software utilised by GWMWater. The ERP fully integrates works and assets with finance, payroll, budgeting, performance management, safety, human resources, billing, GIS, and customer request management. Assets are attached to planned and reactive work orders and this is building a history of cost performance.

### 5.8.2. *Productivity and Efficiency*

In identifying the productivity and efficiency opportunities for 2018-2023 there is an acknowledgement that GWMWater cannot continue to achieve the very significant productivity and efficiency targets of 4.3% that were attained in the 2013-2018 regulatory period.

The 2018-2023 Water Price Submission is premised on a productivity and efficiency aspiration of 2.5% of which 1.5% has been locked into in this price submission from a pricing perspective. The key productivity and efficiency initiatives include:

- Urban Remote Metering and benefits of automated customer meter reading,
- Rationalisation of redundant infrastructure including removal of high risk assets,
- Ongoing application of the Supervisory Control and Data Acquisition (SCADA) system from an operational surveillance that will progressively extend to control,
- Continuously improving and innovating to maximise the utilisation and performance of our assets and infrastructure through the analysis of actual performance data captured via electronic work orders,
- The introduction of resource tracking to supplement the works management system,
- Energy efficiency savings and review of renewable energy options, and
- Temporary trade of unused water entitlements held on the Murray System.

These productivities and efficiencies will ensure that GWMWater continues to deliver value to its customers.

### 5.8.3. *Baseline Expenditure*

Baseline operating expenditure in 2016/17 reflects a low consumption year. An adjustment has been included to reflect average rural and urban electricity costs and average toll payments to Aquatower for water treatment services they provide to five of our urban towns.

The adjustments to baseline year expenditure are reflective of efficient operating costs and provide a basis to reference forecast expenditure that is consistent with demand forecasts.

### 5.8.4. *Urban Remote Metering*

Urban remote metering will achieve the efficiency of avoided meter reading costs offset by the incremental cost of data collection charges from the devices in the field. The net operating benefit before depreciation is assumed to be \$14.69 per customer and the avoided incidence of around 130,000 meter reads per year. The proposed introduction of remote metering and extension of the customer portal to urban customers is cost neutral in accordance with the business case which has been based on existing technologies in use at GWMWater. Market intelligence gathered in the development of the business case would suggest a better outcome that will assist GWMWater to achieve its 2.5% productivity aspiration.

The business case for the project indicates a positive community benefit of 1:1.29 when taking into consideration the broader benefits of urban remote metering.



#### 5.8.5. *Service Upgrade Expenditure*

Water quality upgrades will be undertaken in the towns of Kaniva, Moyston, Ultima and depending on the outcome of further consultation, Elmhurst. The additional cost associated with water treatment have been incorporated into the cost basis of urban water. The technology assumed for the purpose of representation in the Price Submission has been to deliver drinking water from nearby treatment plants via transfer pipelines or to construct a standalone water treatment plant depending on the most prudent and efficient option. Operating costs are benchmarked to the operating costs of similar existing operations.

The Goroke sewerage system is modelled on the Common Effluent Drainage System in Natimuk and the service relates to the draining of liquid waste to a central treatment point. A definitive disposal option is yet to be established for the liquid waste but it is assumed that a nearby land based irrigation application will be established. GWMWater will take responsibility for the programmed removal of the physical waste as a way of effectively ensuring the performance of the system. The cost for Goroke has been benchmarked on the cost of servicing Natimuk that also has a Common Effluent Discharge system.

#### 5.8.6. *Programmed Maintenance Expenditure*

##### *Water Mains and Urban Storage Cleaning Program*

GWMWater undertakes an extensive program of air scouring and storage cleaning across its urban water systems. The program is one of a range of measures employed to comply with the *Safe Drinking Water Act 2003* for treated supplies and to provide aesthetically acceptable water quality in regulated supplies.

##### *Wastewater Lagoon De-sludging Program*

Periodic sludge surveys and ongoing monitoring of the performance of the lagoons inform GWMWater's wastewater lagoon de-sludging program. The frequency of desludging varies from site to site and depends on a number of variables including rate of inflow, lagoon size etc.

##### *Maintenance Strategy*

GWMWater plan to review the effectiveness and efficiency of the maintenance program during the regulatory period to ensure that the maintenance effort is being allocated to the appropriate assets and is providing the desired outcomes.

#### 5.8.7. *Electricity Costs*

The collective work undertaken by VicWater has been used to underpin likely prices in the electricity market across the regulatory period.

A review of historic electricity cost suggests that GWMWater equivalent unit cost is 10% greater than the rest of the water industry. This additional cost relates to the larger number of sites relative to the quantities of electricity used and the greater proportion of 'standing charges' associated with each connection point. GWMWater has applied this relativity to the VicWater forecasts moving forward and adopted the mid-point between Scenario 1 and Scenario 2 as the reference case for the price submission.

Scenario 1 is based on the continuation of the current energy policy vacuum (Base case).

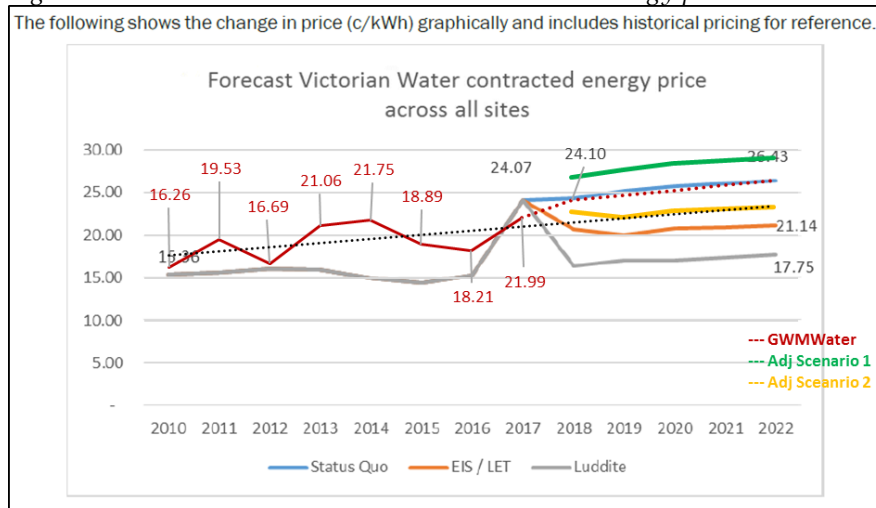
Scenario 2 projection is based on some form of on-going carbon pricing such as an Energy Intensity Scheme (EIS) or the Finkel proposed Clean Energy Target (CET).

GWMWater comes out of contract during 2017/18. The baseline reference price has been set at 24.10 c/kWh based on current contract prices. Escalation beyond this point is assumed to be CPI.

The context of this strengthen the premise of GWMWater’s program to achieve commitments made in the carbon pledge by using the plethora of GWMWater sites to take advantage of behind the meter renewable installations.

Figure 5-18 overlays GWMWater’s actual cents per kWh and forecasts relative the VicWater projections.

Figure 5-18 Forecast Victorian Water contracted energy price across all sites versus GWMWater projections



Electricity consumption is based on average demand and incremental efficiency gains achieved over the past regulatory period. Forward electricity projections are calculated based on incremental kilowatt-hours relative to demand forecasts.

#### 5.8.8. Cost Escalation

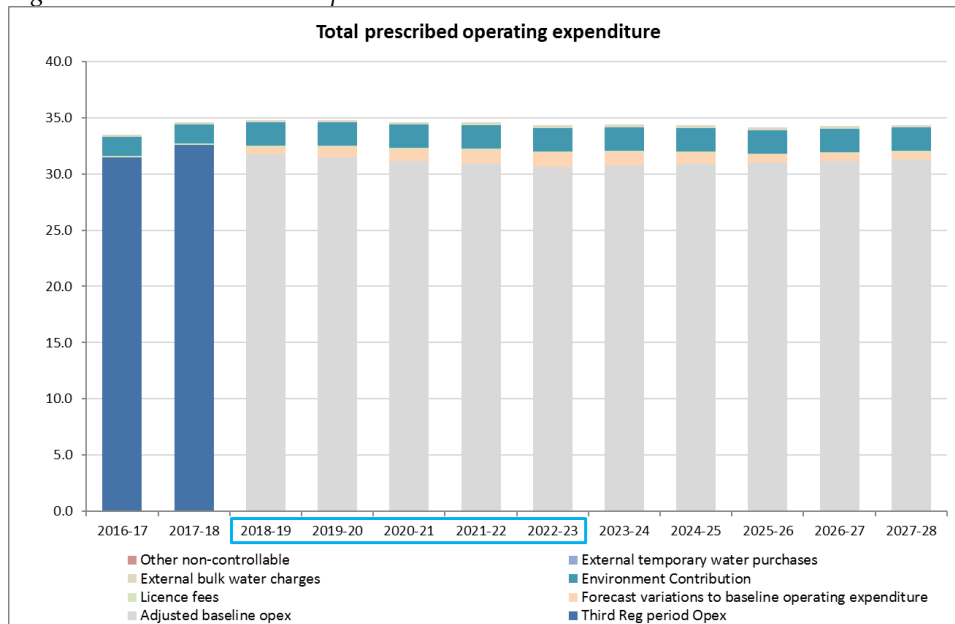
All other costs other than labour are assumed to escalate with CPI, 0% real.

Labour costs beyond the current Enterprise Bargaining Agreement are assumed to increase in line with the Victorian Government Wages Policy of 2.5% including CPI or 0.2% real.

#### 5.8.9. Recurrent Expenditure

The recurrent expenditure outlook reflecting the assumptions as outlined above is summarised in Figure 5-19

Figure 5-19 Recurrent Expenditure Outlook



### **GWMWater Proposal**

The 2018-2023 Water Price Submission is premised on a productivity and efficiency aspiration of 2.5% of which 1.5% has been locked into in this price submission from a pricing perspective.

### **5.9 Forecast Capital Expenditure**

The Strategic Asset Management Plan has provided the basis of the capital expenditure program.

This 2018-2023 Water Price Submission is returning to a more substantial asset renewal program with relatively minor compliance expenditure on water quality and wastewater. Rural pipeline expenditure may increase depending upon the outcome of the feasibility assessments/business cases for studies presently underway in the East Grampians, West Wimmera and Rocklands/Taylors Lake area. For these projects to proceed, they will require substantial customer and third party funding with a benefit attributing to GWMWater’s broader customer base through the growth water sales program. This model has been the basis of other rural pipeline extensions with the most significant being the South West Loddon Project.

### **5.10 Major Capital Projects**

Over the next five years, GWMWater is programming a diverse range of projects.

For asset renewal and decommissioning the asset management system and the associated Strategic Asset Management Plan (SAMP) are improving in their maturity to support the development of the overall capital program.

The asset system supports the establishment of rates to underpin the development of the capital program. These are the rates used in the most recent revaluation with annual market adjustments. The application of this data supports the costing of the program at both the detail level and the strategic level.

Business cases are prepared for major projects in line with the DTF Investment Management Standard and are supported by Monte Carlo assessments to prepare P50 project cost estimates.

#### 5.10.1. *Decommissioning of Redundant Assets*

The decommissioning program is a risk based program of work that allocates funds for removing infrastructure that is no longer used, but potentially presents a risk from a public safety perspective.

A significant proportion of this relates to the old channel network where it intersected with roads. These bridges and culverts remain part of the road infrastructure and their condition monitored as part of our overall asset management program. The aim is to time the replacement when the condition of the infrastructure deteriorates to the point where it renders that part of the road unsafe or when there is a resurfacing activity programmed by the relevant Shire or VicRoads.

The decommissioning also relates to urban infrastructure such as storages that have become redundant following the reconfiguration of services as a consequence of the investments that have been made over time.

#### **GWMWater Proposal**

GWMWater has developed a risk based program relating to the removal of redundant infrastructure

#### 5.10.2. *Dam Safety Works Lake Fyans*

This is a project that was identified ten years ago and given a lower priority with an active monitoring program. The work identified was part of a risk assessment applying the Australian National Committee On Large Dams (ANCOLD) guidelines. The project was identified as being at the As Low As Reasonably Practicable (ALARP) level and as such needed to be considered in the context of the overall risk profile of GWMWater.

The condition of the embankment has deteriorated over time with recent inspection reports noting sections to be in poor to fair condition. The risk is also influenced by the desire to maintain the lake at higher operating levels to maintain better water quality in the lake and improve its recreational amenity.

The proposed scope aims to reconstruct the crest of the main embankment to reinstate gravel capping and embankment profile. Specifically the works will include placement of filters and stabilising fill, and reinstatement of beaching (rip rap) on affected sections. The works will eliminate undulations and depressions and repair erosion along the embankment. Other reinstatement works will occur at the access ramp where there are noted slippage and drainage

issues. The works are programmed for 2021/22 and ongoing maintenance will ensure issues are managed until the embankment is reconstructed.

A risk assessment has also been undertaken of Lake Lonsdale by application of ANCOLD dam guidelines. Whilst works have been identified the risks can be managed through operational strategies and any potential work deferred to future regulatory periods.

**GWMWater Proposal**

GWMWater will commit to the reconstruction of the crest of the main embankment to reinstate gravel capping and the embankment profile at Lake Fyans.

This work is programmed to be undertaken in 2021/22.

*5.10.3. Water Quality – Kaniva, Ultima, Moyston and Elmhurst*

Water quality remains the most significant risk on the GWMWater risk register. This risk is strongly influenced by the extent of regulated town water supplies that remain.

This risk also extends to our reputation and relationship with customers in this customer group. Our most recent customer survey suggests that urban customers in towns that have a regulated water supply are least favourably predisposed to GWMWater. The towns of Kaniva, Ultima, Moyston and Elmhurst were screened as priority towns using a water quality risk management framework and the towns surveyed in relation to their desire for receiving a water quality upgrade.

This information was presented to the Deliberative Panel, with consensus reached that Kaniva, Ultima, and Moyston should have an upgraded water supply irrespective of the proposed realignment of the tariff to a treated water tariff. Qualified support was provided for Elmhurst with the Deliberative Panel wanting GWMWater to satisfy themselves that there is adequate community support for a water quality upgrade.

The cost estimates for the projects have been based on delivering drinking water from nearby treatment plants via transfer pipelines or constructing a standalone water treatment plant depending on the most prudent and efficient option. The option selected will be subject of further evaluation with a key focus on estimates.

**GWMWater Proposal**

GWMWater will commit to improving water quality in the towns of Kaniva, Moyston and Ultima. Water quality improvements in Elmhurst will be the subject of further consultation with the community.

The technical solutions are predicated on delivering drinking water from nearby treatment plants via transfer pipelines or constructing a standalone water treatment plant depending on the most prudent and efficient option.

#### 5.10.4. Goroke Sewerage

The sanitation issues at Goroke were first formally registered with GWMWater in 2014 when West Wimmera Shire lodged the Municipal Wastewater Management Plan.

The West Wimmera Wastewater Management Plan highlighted the environmental issues that still existed in the town after Council received funds to assist landowners upgrade septic tanks and greywater systems. Periodically, the sewage from these systems could not be effectively contained on the household blocks and would run off into the drainage system.

The investigations into the project have identified a Septic Effluent Drainage System as the preferred solution. The contribution model is based on the same model as the schemes that existed under the Country Water and Sewerage Scheme.

During a council briefing, Ararat Rural City Council expressed a desire to have Moyston seweraged. This will be assessed on receipt of a municipal wastewater management plan.

#### **GWMWater Proposal**

GWMWater will commit to sewer Goroke Stage 1 as a common effluent drainage system with a service model consistent with a Natimuk where GWMWater takes responsibility for the coordination of the collection of physical waste.

#### 5.10.5. Urban Remote Metering and Customer Portal

A Business Case has been prepared for the introduction of remote metering and the associated customer portal. The business case has been based on application the Department of Treasury and Finance (DTF) Investment Management Standard.

The business case has been lodged with DELWP and DTF as a companion document of the GWMWater 2017/18 Corporate Plan in recognition that as a technology project it may be considered high value high risk

The currently understood cost base of the rural remote metering solution has underpinned the economic analysis for the business case. Apart from the customer portal that will continue to underpin the customer facing of the solution, the communications and meter transmission devices and data aggregation services will be market tested.

#### **GWMWater Proposal**

GWMWater will extend the use of the customer portal to urban customers supported by the introduction of urban remote metering.

#### 5.10.6. Development Servicing - Pressure Improvements Commercial and Industrial - Fire Services

The general service standard for GWMWater under its urban charter is 20 litres per minute, at the property boundary or 20 metres.

The disparate nature of GWMWater systems, combined with the desire to regulate pressures to levels that will protect the infrastructure and minimise leakage, has given rise to a situation

where many redevelopments within the Central Business District (CBD) and industrial estates require on site water infrastructure to meet fire service requirements. This has been the subject of a detailed study of development servicing undertaken by TGM.

This was raised as a collective issue by local government and has its origins in the changes to the Building Regulations 2006. Under the regulations, the Country Fire Authority (CFA) assume the role of the Chief Fire Officer and they make a determination on Fire Service Requirements. 'The *Australian Standard AS2419.1 Fire Hydrant Installations - Table 2.2* requires minimum pressures of 20m for feed hydrants and 35 m for attack hydrants. Attack hydrants are hydrants that will be used where a fire truck is not able to access. Generally attack hydrants are located within private property to provide coverage beyond what street hydrants can reach. Coverage calculations for hydrants allow for 60 metre hoses and 10 metres of spray. 'AS2441 - Installation of Hose Reels requires pressures of 22 metres'<sup>1</sup>.

The TGM study focussed on the towns of Horsham, Stawell and Ararat and concluded that pressure issues were confined to Horsham. Pressures in Ararat and Stawell were at or above 40 metres. Ararat was found to be experiencing flow issues in some areas during peak demand periods, indicating the possible presence of restrictions in either pipes themselves or in fittings such as valves, hydrants and tees. This is the focus of future investigations to guide replacement of compromised assets. All towns will require upgrades to meet future demands from peripheral growth and redevelopment.

The major issue with the Horsham system is the lack of pressure available for fire services. It is recommended that the pressures be increased by increasing the pressure at the pressure reducing valves. This would allow businesses establishing in Horsham the same available pressures other cities have and remove the current competitive disadvantage.

The TGM report recommends pressures be increased by adjusting settings at the pressure reducing valves. Minor upgrades will be required to support this change. The upgrade seeks to achieve 40 metres of pressure to meet fire service requirements. The priority for upgrades is commercial and industrial areas, hospitals and schools. However, the interconnected nature of the network will result in general pressure improvements.

It is acknowledged that this will potentially have an adverse impact on infrastructure performance and bring forward asset renewal in areas where infrastructure is vulnerable. In Horsham, increasing pressures will defer the need for some augmentation required to meet growth projections.

The TGM study also assessed the capability of wastewater infrastructure in all three towns but the findings were inconclusive in relation to Horsham, Stawell and Ararat as existing sewer models are not calibrated. Future upgrades to sewer networks in these towns and other priority towns will be informed by the installation of flow monitoring at key network locations.

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<sup>1</sup> 'Development Servicing Plans - Horsham, Stawell and Ararat, May 2017'

Stawell number one pump station was upgraded in 2003 and there have not been performance issues since that time. The Alfred Street Pump station upgrade in Ararat was completed in 2016/17. The Horsham wastewater system will be the subject of a major study during the next regulatory period that will consider all aspects of wastewater including the location of the wastewater treatment plant.

Further studies will be undertaken in other major towns with Nhill, Dimboola, Warracknabeal, St Arnaud, Donald, Charlton and Ouyen being identified as priority towns.

#### **GWMWater Proposal**

GWMWater will increase water pressures to 40 metres in Horsham to meet firefighting requirements and undertake necessary upgrades in Stawell and Ararat to maintain pressures and facilitate further growth.

The impact of increasing pressure to support fire services is to potentially impact infrastructure performance and in doing so advance the renewal of infrastructure Horsham. Further studies will be undertaken in other major towns with Nhill, Dimboola, Warracknabeal, St Arnaud, Donald, Charlton and Ouyen being identified as priority towns. The recovery of costs associated with maintaining 40 metres pressure in Commercial and Industrial zones are funded through the fire service.

#### *5.10.7. Asset Renewal – Water*

GWMWater has a requirement to provide a reliable supply of water that is fit for purpose to all customers. This is achieved by renewing assets that pose very high risks, maintaining service levels for water supply reliability and quality, and minimising asset lifecycle costs.

Very high risks in the water supply system are typically risks of supply interruption to large numbers of customers, risks of lengthy interruptions, risk of low flows through fire hydrants and safety risks. Assets that present as very high risk include urban water mains and water storage tanks. There is an ongoing renewal program for these assets taking into account asset age and condition, as well as potential consequence of failure.

Service standards for water supply assets focus on the both quality and reliability of supply for urban and rural customers. The asset management strategy is to renew these assets just before they give unacceptable performance with condition based assessments and failure history used to identify those assets that are to be renewed.

Failure of asbestos-cement (AC) water mains is the main driver that impacts on reliability service standards, followed by failure of service connections. Forty three percent of urban mains are AC, with 21% of those assets experiencing breaks in 2016/17. GWMWater has commenced a program to renew these assets and is planning to continue this program over coming years as assets reach the end of their expected life.

Other water supply assets including rural water mains, service connections and water supply bores are considered low risk and will be renewed reactively at the time of failure.



**GMMWater Proposal**

GMMWater is committed to managing water supply assets by eliminating very high risks, maintaining service levels for all customers, and ensuring asset lifecycle costs are minimised. Key to this strategy is the renewal of aged assets that place at risk the delivery of a reliable supply of water that is fit for purpose to all customers.

*5.10.8. Asset Renewal Wastewater*

GMMWater's wastewater collection assets comprise sewer main networks, sewer pump stations, reclaimed water mains and pressure sewer units across 28 towns in our service area. These assets are managed to ensure very high risks are eliminated, service standards for service reliability are achieved, and lifecycle costs are minimised.

Very high risks in the wastewater collection system are typically risks of sewer spills causing significant environmental damage and deep sewer collapse resulting in lengthy impacts to service. Assets that present as very high risk are aged sewer mains and sewer pump stations. There is an ongoing renewal program for these assets taking into account asset age and condition, as well as potential consequence of failure.

Service standards for wastewater supply assets focuses on service reliability KPIs for blockages, spills and customer complaints with the main driver of performance issues being sewer blockages due to tree root intrusion. At present GMMWater's performance is unfavourable with the second highest rate of sewer blocks per 100km of sewer mains in Victoria. The strategy to achieve targeted service standards is to focus on areas with highest blockage rates, use Closed Circuit Television (CCTV), cleaning and root treatment, and renew assets where failure is imminent. GMMWater has commenced a program to renew these sewer main assets and is planning to continue this program over coming years as assets reach the end of their expected life.

Wastewater assets associated with sewer pump stations, reclaimed water mains and pressure sewer units are considered low risk and will be renewed reactively at the time of failure.

**GMMWater Proposal**

GMMWater is committed to managing wastewater collection assets by eliminating very high risks, achieving service levels for all customers, and ensuring asset lifecycle costs are minimised. Key to this strategy is the ongoing renewal program of aged sewer main assets that currently experiences high rates of blockages due to tree root intrusion.

Under the risk management framework of asset management decisions to replace based on assessments of condition and criticality.

*5.10.9. Donald Wastewater Treatment*

Donald Wastewater Treatment Plant is a lagoon system consisting of a facultative pond and a maturation pond. Reclaimed water from the maturation pond is directly used to flood irrigate approximately 16 ha of tree lots.

GWMWater currently experience a number of performance issues with the Donald Wastewater Treatment Plant (WWTP) including:

- influent is highly saline due to intrusion of ground water into the sewer reticulation system,
- the effluent is not meeting EPA licence requirements regarding BOD5, E-coli and nutrients,
- the reclaimed water is not suitable for sustainable reuse, and
- excessive irrigation is causing pooling of effluent and there are odour issues in the irrigation area.

GWMWater relined a section of the sewer reticulation system most prone to groundwater intrusion in 2015. This work is being assessed to establish whether the relining work has been successful in reducing intrusion of groundwater and whether further relining work is warranted and likely to be a cost-effective and enduring solution.

The works required at the Donald WWTP to address the other issues that have been identified and include:

- installation of an aerobic fermentation pit at the inlet,
- modification of lagoon layout to eliminate short-circuiting,
- provision of mechanical aerators,
- installation of a scum removal trough, and
- provision of a winter storage lagoon.

#### **GWMWater Proposal**

GWMWater proposes to undertake an upgrade of the Donald Wastewater Treatment Plant to ensure effluent achieves EPA licence requirements, reclaimed water is suitable for reuse, and site irrigation using reclaimed water meets EPA licence requirements.

#### *5.10.10. Water Treatment Plant Upgrades – Health Based Treatment Targets (HBT)*

Ouyen, Manangatang, and Underbool water treatment plants each treat water from the Murray River. The Murray River is a Category 4 source water under the *Safe Drinking Water Regulations Health Based Treatment Targets (HBT)* framework. This source of water experiences periods of elevated turbidity, black water events and algal blooms.

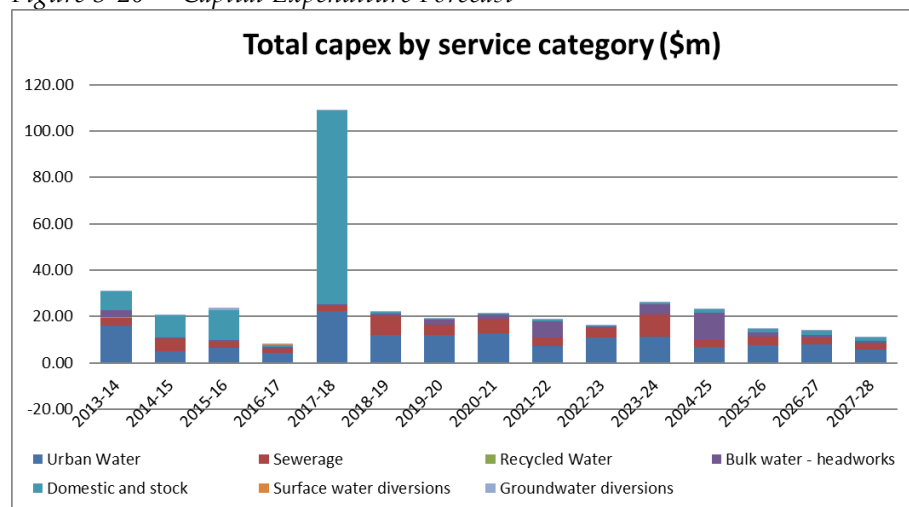
Further treatment processes are required to provide sufficient log reduction of bacteria, viruses and protozoa to comply with the Health Based Treatment Targets.

#### **GWMWater Proposal**

Water treatment plant upgrades will be undertaken at Ouyen, Manangatang and Underbool to achieve compliance with the HBT.

### 5.10.11. Capital Expenditure

Figure 5-20 Capital Expenditure Forecast



## 5.11 Forecast Regulatory Asset Base

The opening value of the Regulatory Asset Base (RAB) is according to the audited 2016/17 financial statements adjusted for differential treatment of expenditure for regulatory purposes as opposed to statutory accounting purposes.

The major capital projects and capital expenditure that will influence the RAB is outlined in Section 5.10.

### 5.11.1. Government Contributions

For the duration of the next pricing period, it has been assumed there will be no government contributions. New initiatives may attract government contributions during the regulatory period but with no definitive programs to match, no government contributions assumed.

Government has however co-funded studies for investigations into projects that will only proceed if there is government / third party support. Three major studies presently underway are the East Grampians, West Wimmera and Rockland to Taylors Lake Study. Given government support for the investigations it would be reasonable to assume that at least one of these projects will produce a business case that would be supported.

The funding model assumes that there will be no upward price impact for the broader customer base for such projects. If it involves the sale of growth then such projects will produce a minor price benefit. A negotiated customer contribution would be determined based on value/benefit to the landowner. Government contribution(s) would be considered in the context of the overall Benefit/Cost ratio for the project.

### 5.11.2. New Customer Contribution

The New Customer Contribution framework applies on the same basis for urban and rural applications with the exception of rural pipeline water allowances.

### Urban New Customer Contributions

The reference point for urban New Customer Contributions (NCCs) is set in the context of low growth and as a result the level of customer contribution is zero and all NCCs assessed on a case-by-case basis. The low, zero or in some cases negative growth give rise to a base assumption that the capacity to service any new development is there unless a technical assessment determines otherwise. By application of the principles based approach an assessment is made to establish the level of contribution for all new extensions to the water and wastewater network.

### Rural New Customer Contribution

Rural new customer contributions inside the established rural pipeline (Wimmera Mallee) waterworks district will generally only require the acquisition of growth water. This assumes that the developer would tap at the nearest access point to the network and would be responsible for the construction of any infrastructure himself or herself. The only exception is in the case of large-scale developments that have significant water requirements that may require augmentation of the network beyond any local infrastructure requirement.

Where new connections go beyond the existing network and the landowner(s) are looking to GWMWater to develop the project as a scheme. In these cases, GWMWater using the NCC principles based approach works out the level of contribution. In the event landowners consider this beyond their affordability this may be the start of any dialogue with government in relation to a willingness to contribute.

For the purpose of presentation in this price submission, it is assumed that all landowners will fund their own extensions that are part of a broader scheme.

These will give rise to growth water sales that offset the RAB as it is the realisation of an asset created by virtue of the construction of the pipeline.

#### *5.11.3. Gifted Assets*

As outlined in the section dealing with demand forecasts the region experiences relatively low growth and future rates are likely to be consistent with the past and as a result estimates for gifted assets are based on recent actual gifted assets.

#### *5.11.4. Sale and Disposal of Assets*

After the turnover of plant and equipment, there is very little activity in the sale and disposal of assets.

There is a minor program of channel land sale in the exceptional circumstances where GWMWater holds clear title as opposed to easement over channel alignments. To the extent GWMWater has any significant parcels of land, these have been identified as opportunities for the location of renewable generation that will assist in the development of the GWMWater pledge.

The general decommissioning program that is identified in the section 5.10.1 gives rise to an eventual disposal of the asset. From a statutory accounting perspective, these are already

written down as they no longer meet the definition of an asset as they do not produce any 'future economic benefit'. Consistent with the agreed treatment for this expenditure in the 2013 Water Price Review, decommissioning is treated as a capital spend and therefore attracts regulatory depreciation as well as a regulatory return.

## 5.12 PREMO Rating

GWMWater has used the scoring system of its guidance as the basis for rating under PREMO.

Figure 5-21 Scoring System for a PREMO rating

**TABLE A SCORING SYSTEM FOR A PREMO RATING**

Rating	Possible scores for each element of PREMO		Aggregated score for overall PREMO rating
<b>Leading</b>	4	Very confident the element is 'Leading'	15.5 to 16
	3.75	Confident the element is 'Leading'	
<b>Advanced</b>	3.5	Very confident the element is 'Advanced'	11.5 to 15.25
	3.25	Confident the element is 'Advanced'	
	3	Satisfied the element is 'Advanced'	
	2.75	Reasonably confident the element is 'Advanced'	
<b>Standard</b>	2.5	Very confident the element is 'Standard'	7.5 to 11.25
	2.25	Confident the element is 'Standard'	
	2	Satisfied the element is 'Standard'	
	1.75	Reasonably confident the element is 'Standard'	
<b>Basic</b>	1.5	Very confident the element is 'Basic'	4 to 7.25
	1.25	Confident the element is 'Basic'	
	1	Satisfied the element is 'Basic'	

### 5.12.1. Outcome

Perhaps one of the biggest challenges GWMWater faces as a water business relates to its breadth and scope of activity. As a vertically integrated water business, covering an area that is sparsely populated providing services to rural landowners, urban centres, the environment and the community our portfolio is significant. This makes it difficult to achieve good clarity on outcome.

At the very outset in the development of the Regulatory Strategy GWMWater identified a range of topics that would be considered in more detail and therefore be the subject of deeper engagement in the delivery of the Pricing Submission and value outcome.

The outcome parameters and associated considerations by the Deliberative Panel provide a number of initiatives GWMWater is undertaking that enhance the value proposition of services provided to the region. These initiatives include;

- Development Services / Fire Services – Horsham Stawell and Ararat
- Water Quality
- Goroke Sewerage
- Rural Homestead Water Carting embedded when water quality at risk
- Urban Water Quality GSL
- Urban Remote Metering and the Customer Portal
- Productivity 1.5%
- Recreation Contribution Charge
- Performance Planning and Reporting

GMMWater has assessed the PREMO rating to be confident that the outcomes reflected in the Pricing Submission is advanced with a score of 3.25.

#### 5.12.2. *Management*

The Board and Executive of GMMWater exercise strong governance over all its activities.

The Regulatory Strategy has been a point of reference for tracking progress in the development of the Pricing Submission. A Pricing Submission Working Group of the Board has helped guide management on the development of the 2018-2023 Water Price Submission. A management-working group has also been active in overseeing the development of the topics to be considered in the development of the plan.

The audit and assurance program overseen by the Audit Governance and Risk Committee has been aligned to providing a level of independent review over processes and systems, the management will use and therefore the Board rely upon to prepare the 2018-2023 Water Price Submission.

The programs and activities herein meet all the requirements of Victorian government policy, the expectations of technical regulators, the guidance paper and all the relevant legislative requirements.

The 2018-2023 Water Price Submission sets an aspirational productivity target of 2.5%, with a 1.5% productivity improvement within the price outcome. This is a hedge for the risk inherent in the plan, particularly in relation to growth water sales and bulk water revenue.

GMMWater uses the same planning tools for all its strategic and operating plans. The performance planning and publisher tools applying the budgeting and business intelligence tools of the OneWater system we use ensure consistency of budgets and forecasts.

The processes specific to the development and procurement of projects ensure the best value outcome to customers. These maximise the use of any infrastructure already installed, uses the knowledge base of the asset system to produce reliable cost estimates, utilises project delivery methods that seek to optimise the risk assignment and applies best practice cost management and reporting.

It is for this reason that GWMWater considers the management aspects of the Pricing Submission to be leading at the confident level with a score of 3.75

#### 5.12.3. *Engagement*

GWMWater has a multifaceted community engagement model that has its origins in the IAP2 Public Participation Model.

GWMWater conducts a biannual Customer and Stakeholder Forum that assists the Board in getting a better understanding of community opinion on a range of topics that it uses to help develop policy. It also has a number of other forums that are more single-issue forums that also help shape policy issues for GWMWater. These include the Groundwater committees and the Recreation water user group.

In the lead up to the development of the Pricing Submission, many of the topics and themes that formed the basis of the Regulatory Strategy were the subject of consultation at the various customer and stakeholder forums. Many of the topics that we already had a view on were then the subject of customer and on line surveys with the information used to further poll community sentiment.

In evolving its communications and engagement, strategy the Board supported the formation of a Deliberative Panel to guide it on price and service issues specific to the Price Submission. The Deliberative Panel was loosely modelled on the Customer Forum used by the Scottish Water Commission. The Scottish Water Commission was consulted on the role and function of the Customer Forum with direct input from the Scottish Water Commission as well as the Chair of the Customer Forum, Peter Peacock.

The Board appointed an independent Chair, but from that point, the Chair was responsible for the appointing members of the Panel. The aim was to get customers and members of the community who were unknown to GWMWater and had no affinity with GWMWater. Once assembled the Panel met on four occasions to consider technical summaries of themes and topics that were to be considered in the context of the Pricing Submission. Upon completion of their deliberations, the Deliberative Panel presented their findings to a Customer and Stakeholder Workshop held on 1 September 2017. This workshop was conducted for the specific purpose of dealing with price and service issues specific to the Pricing Submission.

The Deliberative Panel then prepared its own report that was presented to the Board at its September meeting.

The level of engagement has been deep and wide reaching with the assessment being very confident that the rating is leading with a score of 4.

#### 5.12.4. *Risk*

GWMWater internal auditors RSM assessed GWMWater as having a mature risk management framework.

GWMWater is confident in its ability to deliver a 1.5% productivity outcome and whilst considered a stretch, 2.5% is considered very achievable. The initiatives already implemented such as SCADA, works management and the rural remote metering and customer portal provide a baseline for further productivity opportunity. These need to be considered in the context of urban remote metering and the renewables associated with the carbon pledge that are considered to be opportunities to further improve our efficiency.

The revenue targets associated with the sale of growth water are very ambitious. For these to be realised the East Grampians Rural Water Study and the West Wimmera Study would need to be progressed. There would also need to be further investment in intensive agriculture across the region with water sourced by acquisition of new water holdings as opposed to being underpinned by existing water holding. GWMWater has also registered some revenue risk associated with large water holders that have not been making use of their water holding.

The baseline proportion of fixed and variable elements of the tariff are to be held constant with any tariff increases to be full applied to the variable component of the tariff. This will give rise to an increasing level of customer empowerment in relation to water use moving forward.

Environmental water charging has been the subject of a review by DELWP and the outcome of the review had not been finalised at the time of finalising the 2018-2023 Price Submission.

With the exception of tariff design, GWMWater has demonstrated a strong appetite for taking on risk in this price submission. Based on this assessment of risk GWMWater’s rating of risk for the purpose of PREMO is being confident the element is standard with a rating of 3.

#### 5.12.5. PREMO Summary

The factors that lead us to downgrade our PREMO rating have been the assessment for Outcome and Risk where we have considered our submission advanced and standard. In the Management and Engagement area, we consider GWMWater has been very much leading.

Table 5-7 PREMO Self-Assessment

	Outcome	Management	Engagement	Risk	Total
	Advanced	Leading	Leading	Advanced	Advanced
Score	3.25	3.75	4	3	14

#### **GWMWater Proposal**

Based on the GWMWater assessment of the 2018 -2023 Water Price Submission GWMWater has rated its submission as and advanced proposals and has assigned a return on equity of 4.9%.



### 5.13 Tax Allowance

The requirement to revalue assets was an integral part of the water reform agenda agreed by the states in 1994 under COAG.

The revaluation preceded entry into the State Tax Equivalence Regime (STER) and ultimate transition to the National Tax Equivalence Regime (NTER). The revalued amounts were 'grandfathered' into the STER and ultimately applied in the NTER. By virtue of these values and the accelerated tax depreciation provisions available at that time, GMMWater has significant carry forward tax losses.

The revaluation of assets to fair value in 2011 resulted in the value of Deferred Tax Liabilities exceeding the value of Deferred Tax Assets. Therefore, the Corporation was required to reflect the movements in the tax position within the accounts. It is assumed that future fair value increments will be offset by ongoing tax losses with no tax adjustments over the planning period.

Given the significant carry forward tax losses, GMMWater is not projecting any tax payment over the 2018-2023 regulatory period or the 2023-2028.

#### **GMMWater Proposal**

Given the significant carry forward tax losses, GMMWater is not projecting any tax payment over the 2018-2023 regulatory period or the 2023-2028.

### 5.14 Form of Price Control

The GMMWater contribution to the WMP funding model was very much reliant on sale of and trailing revenue arising from the sale of growth water. Whilst the growth water sales targets are reasonably ambitious, the risk of not achieving these can be managed. Most other risks that have been identified are controllable and as a water business we are confident in our capability to effect controls that either mitigate or manage these risks.

Given our confidence in managing our portfolio of risks, we are seeking to convert the form of price control from a Revenue Cap to a Weighted Average Price Cap. This will allow GMMWater to revisit bulk water (headworks) pricing in the context of the outcome of the review of environmental water pricing review that has been undertaken by DELWP.

Environmental water pricing in the Wimmera Glenelg system is primarily a bulk water pricing issue. DELWP has undertaken a review of environmental water pricing to develop a policy that will provide greater clarity to the interpretation and application of environmental water pricing specific to the policy context of Water for Victoria. It is anticipated that over the next twelve months, clarity will be provided on how water businesses will implement the environmental water pricing policy of Water for Victoria. This will allow environmental water to be converted to a tariff(s) as opposed to its current representation, which is a block of prescribed revenue.

Apart from the sale of growth water and some risk associated with some large bulk water users, the only other revenue risk rests with environmental water held by the Victorian Environmental Water Holder. GWMWater is looking to utilise a weighted average price cap to provide some flexibility in the outward years to deal with the outcome of the environmental water price review.

**GWMWater Proposal**

GWMWater is proposing a weighted average price cap to provide maximum flexibility in any refinement of tariffs in years 2-5 of the 2018-2023 regulatory period.

**5.15 Revenue Requirement**

GWMWater has applied the benchmark return on equity of PREMO of an advanced submission of 4.9%. In accordance with the ESC guidance, GWMWater has not attempted to assess the cost of debt and has applied the notional cost of debt in the template to calculate the revenue requirement and the associated price outcomes.

Figure 5-22 Revenue Requirement 2018/19 – 2022/23

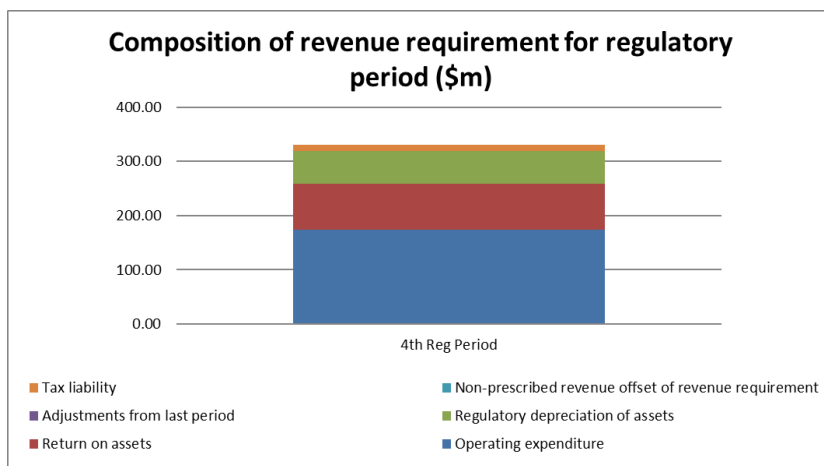
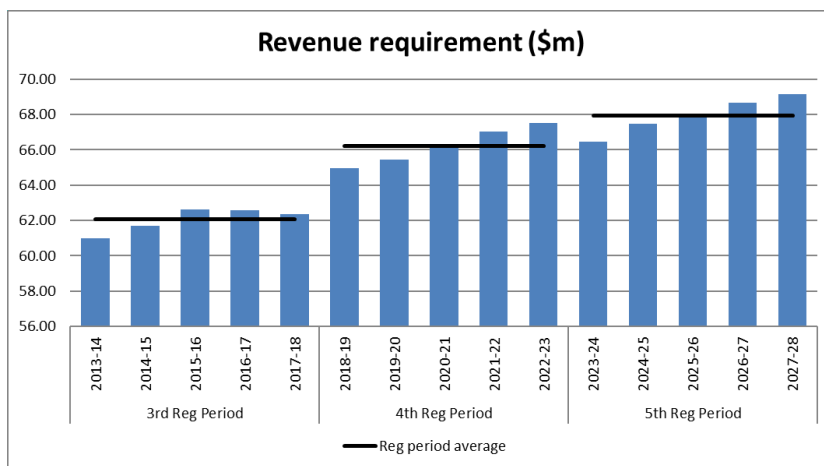


Figure 5-23 Revenue Projections 2013/14 - 2022/23



### **GWMWater Proposal**

GWMWater has applied a Return on Equity of 4.9% consistent with its PREMO assessment of an advanced submission to establish its revenue requirement.

## **5.16 Prices and Tariff Structures – Urban Services**

The urban pricing policy is based on uniform prices differentiated only by the level of service. The dimensions of the service a dimension of either capacity or quality. There are no changes proposed to tariff structures.

### *5.16.1. Water Capacity Service Parameter*

Service capacity to all non-residential customers is based on meter size. The standard tapping size for all urban customers is 20mm although in some isolated instances the service size is 25mm. The multiplier that applies to non-residential tapping sizes of greater than 20mm is outlined in Table 5-15 below.

Table 5-8 Meter Size Multiplier

<b>Meter Size (mm)</b>	<b>Service Charge Multiplier</b>
20	1
25	1.6
32	2.6
40	4
50	6.25
60	10
65/70	12.5
75/80	16
100	25
150	56.25
200	100

### *5.16.2. Water Quality Service Standard*

There are four water quality classifications that underpin the pricing of urban water services. The classifications and the towns that fall into each category is provided below.

### **Group 1 – Drinking Water (full treatment)**

Table 5-9 Common tariff for towns receiving drinking quality water, regardless of supply source

Ararat	Great Western	Murtoa	Sea Lake <sup>#</sup>
Beulah <sup>#</sup>	Halls Gap	Natimuk	St Arnaud
Birchip	Hopetoun	Nhill	Stawell
Brim <sup>#</sup>	Horsham	Ouyen	Underbool
Charlton	Jeparit	Pomonal	Warracknabeal
Dimboola	Lake Bolac	Quambatook	Willaura
Donald	Manangatang	Rainbow	Woomelang <sup>#</sup>
Edenhope	Minyip	Rupanyup	Wycheproof

<sup>#</sup> Capital works planned in 2017/18 to upgrade towns to drinking water quality. Drinking water (potable) tariff will apply following upgrade.

### Group 2 – Regulated Supplies (no treatment)

Table 5-10 Common tariff for all towns supplied with Regulated water via WMP or Northern Mallee Pipeline

Antwerp	Glenorchy	Nullawil	Ultima <sup>2</sup>
Berriwillock	Jung	Patchewollock	Waitchie
Chillingollah	Lalbert	Pimpinio	Walpeup
Chinkapook	Lascelles	Speed	Watchem
Culgoa	Marnoo	Tarranyurk	Yaapeet
Dooen	Nandaly	Tempy	

### Group 3 – Eastern Grampians Pipeline (no treatment)

Table 5-11 Common tariff for Eastern Grampians pipeline towns supplied with regulated water

Buangor	Elmhurst <sup>2</sup>	Wickliffe	Moyston <sup>2</sup>
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### Group 4 – Groundwater (no treatment)

Table 5-12 Common tariff applies to all groundwater towns receiving a Regulated water supply

Apsley	Kaniva <sup>2</sup>	Murrayville	Westmere
Cowangie	Kiata	Harrow	Miram
Goroke	Lillimur	Serviceton	Streatham

The details of the urban water and wastewater tariffs are provided in Appendix 4.

#### 5.16.3. Urban Customer Impact Analysis

The following chart outlines the expected real price decrease for urban customers over the 2018-2023 Pricing Submission period, based on different consumption levels (kL).

Figure 5-24 Overview of Urban Price Impact Analysis 2018/19 to 2022/23



<sup>2</sup> Commitments made to improve water quality, these towns will progress to the drinking water (potable) tariff.



#### 5.17.4. Groundwater Charges

Groundwater is principally a licensing function with the main cost basis being the provision of metering. There is a significant resource monitoring function associated with the licensing of these aquifers with the better quality aquifers highly committed.

GWMWater reviewed the cost of providing groundwater services during previous regulatory periods. Prices for this regulatory period will be maintained constant in real terms.

#### 5.17.5. Unregulated Surface Water Diversions

Unregulated surface water diversions will be reviewed in the context of the review of the Western Region Water Supply Strategy.

In the context of the unregulated systems these are licenced from, this is a very unreliable water holding. This becomes a point of contention amongst many holders of diversion licences.

#### 5.17.6. Bulk Water Charges

Bulk water charges and tariff structure will be maintained constant in real terms.

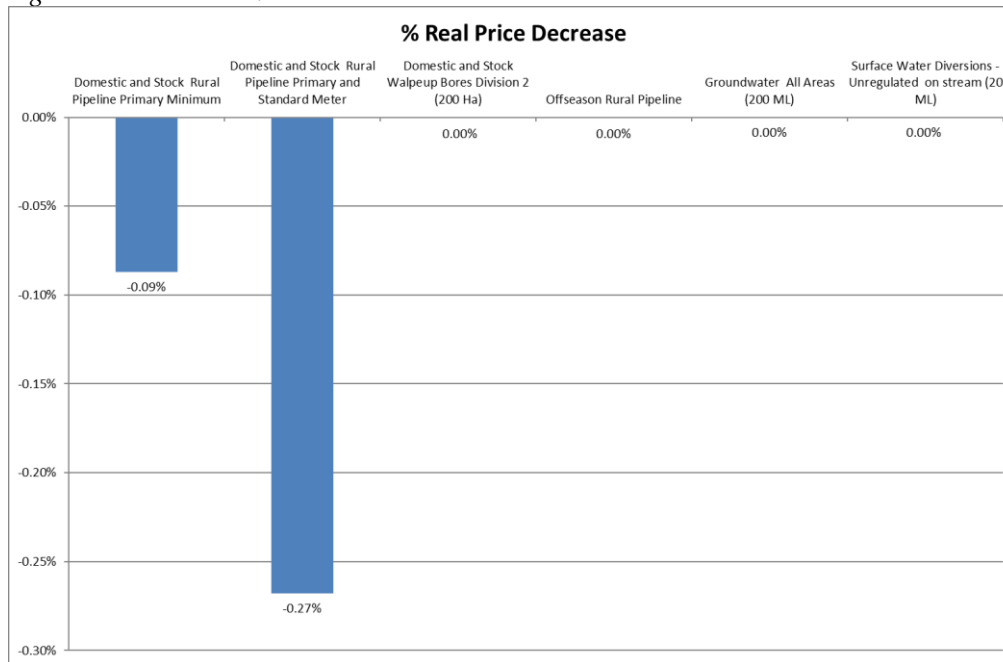
#### 5.17.7. Rural Customer Impact Analysis

The overall impact on rural customers across the 2018-2023 regulatory period is outlined below.

Figure 5-26 Overview of Rural Price Impact Analysis 2018/19 to 2022/23



Figure 5-27 Real % Price Decrease Rural Customers



#### 5.17.8. Recreation Water Pricing

The supply of water to recreation lakes was the most significant issue raised during the Water Plan 3 consultative period. These issues centred primarily on equity relating to access across the region and price. Following extensive community consultation, community support was provided for the introduction of the recreation contribution charge of \$16 per rural and urban water customer with this amount reduced to \$8 where the customer is a concession card holder. The recreation contribution charge would allow the cost of water supplied to recreation lakes to be discounted from the current charge of \$48 per ML to \$20 per ML and volumetric discounts of between 25% - 40% for eligible sporting clubs.

Community support for the GWMWater recreation water policy has been revisited in the context of this 2018-2023 Water Price Submission. The recreation contribution charge has been the subject of telephone and online surveys, the results of which have been inputs to the Deliberative Panel. The Deliberative Panel provided strong support for the retention of the Recreation Contribution Charge. A view was also formed by the Deliberative Panel, along with community support, that this should be extended to schools. The inclusion of schools will lift the value to \$18 and \$9 for concession cardholders.

GWMWater retained the recreation contribution charge at \$20 per ML (nominal) for the duration of the 2013-2018 regulatory period. This commitment was in response to the arguments being presented to GWMWater that after many years of no supply and being dry, the communities needed the opportunity to get facilities re-established at the lakes. GWMWater has reviewed the policy and is proposing to increase the charge to \$25 per ML over the course of this regulatory period.

### 5.17.9. Non-Tariff Revenue

The main sources of non-tariff revenue include:

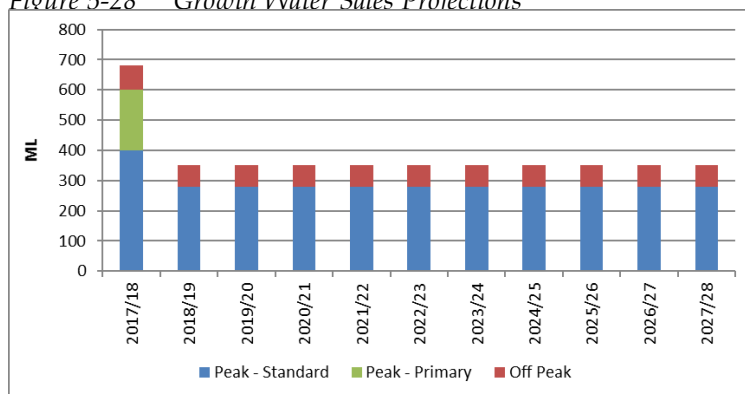
- Contract revenue for major trade waste, non-residential recycled water and Victorian Government environmental water;
- Growth water sales revenue (capital contribution offset to prices); and
- Miscellaneous services.

When the Victorian Government changed its policy in 2014 in the Victorian Waterway Management Strategy for environmental water pricing, GWMWater treated Victorian Environmental Water Holder Wimmera Mallee Pipeline Product in Water Plan 3 as a non-prescribed revenue.

During 2017, DELWP conducted a review of environmental water pricing and at the time of finalising this 2018-2023 Water Price Submission this review was still to be finalised. It is understood, the outcome of this review will be finalised over the next twelve months. Under the GWMWater proposal, the outcome of the environmental water pricing review to the extent that it gives rise to any change in regulatory status can accommodate any change in tariffs in years 2-5 of the regulatory period.

The growth water sales assumptions included in the submission are summarised in figure Figure 5-28 Growth Water Sales Projections.

Figure 5-28 Growth Water Sales Projections



## 5.18 Adjusting Prices

GWMWater propose to continue with existing pricing adjustment mechanisms in the Essential Services Commission 2013, *2013 Water Price Review Final Decision: GWMWater Determination*, June.

## 5.19 New Customer Contributions

The low growth of the region assumes that for all new developments the default position is that there is capacity to meet new development. The baseline assumption is that all New Customer Contributions (NCC's) will apply attract a zero charge.

Any reasonable scale developments are assessed on a 'case by case' basis using the ESC's principles based approach to establish a development specific charge NCC.



The only exception to this is in the case of rural developments and schemes. Where water is sourced from the Wimmera Glenelg growth water pool, the water is acquired as a tradable water allowance, any developer / landowner will need to acquire the tradable water allowance at a cost of \$2,500 per ML.

### **5.20 Non-Prescribed Services**

Non-prescribed revenue and expenditure has been excluded consistent with the preparation of the annual regulatory accounts.

Non-prescribed activities include revenue and expenditure associated with investment properties and interest revenue.