



East Gippsland **Water**

Water Plan 2013-2018



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1. Glossary of Terms

AMS	Asset Management System
BAU	Business As Usual
CAPEX	Capital Expenditure
CCTV	Closed Circuit Television
CPI	Consumer Price Index
CUAC	Consumer Utilities Advocacy Centre
CWS	Clear Water Storage
DSE	Department of Sustainability and Environment
DoH	Department of Health
EGW	East Gippsland Water
EPA	Environment Protection Authority
EQT	Equivalent Tenement
ESC	Essential Services Commission
GIS	Geographic Information System
GSL	Guaranteed Service Level
IOR	Issue Optioneering Report
IT	Information Technology
kL	Kilolitre
KPI	Key Performance Indicator
L	Litre
LPSL	Low Pressure Sewage Pump
\$M	Million dollars
Mm	Millimetre
ML	Megalitre
MSPL	Main Supply Pipeline
NCC	New Customer Contribution
NPV	Net Present Value
OPEX	Operational Expenditure
PPM	Prescribed Price Movement
SCADA	Supervisory Control and Data Acquisition
SMP	Sewerage Master Plan
SPS	Sewage Pump Station
VCOSS	Victorian Council of Social Services
WIRO	Water Industry Regulatory Order
WP1	Water Plan 1
WP2	Water Plan 2
WP3	Water Plan 3
WP4	Water Plan 4
WPS	Water Pump Station
WSDS	Water Supply Demand Strategy
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

2. Executive Summary

East Gippsland Water (EGW) is a Victorian State Government owned corporation that provides urban water and wastewater services to 45,000 people over some 21,000 square kilometres.

Under the Water Industry Regulatory Order (WIRO), which establishes the Victorian Government's economic regulation framework for water, EGW is required to submit a Water Plan to the Essential Services Commission (ESC) prior to the commencement of a five year regulatory period. The next regulatory period commences on 1 July 2013 and will conclude on 30 June 2018.

This is our third water plan (hereafter referred to as WP3) and reflects key strategic outcomes developed by the Board.

The key objective of WP3 is to deliver services to our customers at a standard that meets their expectations but also provides value for money. Our core service standards replicate what we believe is important to our customers, while meeting regulatory requirements. We have evaluated customer expectations through surveys and consultation sessions which have indicated that we currently provide a level of service which meets the needs of our customers.

Once the service standards were set, we were able to establish the cost of delivering the most efficient services to our customers. The key inputs include investing \$46 million on major projects with a strong focus on renewal of assets, \$87.86 million on operational expenses enabling us to meet the agreed service standards as well as the required regulatory returns on and of our asset base. All the works and activities proposed reflect the most efficient use of our existing service networks to minimise price pressures to our customers.

One of the major challenges we have dealt with over the last five years has been a steady decline in water use leading to a significant decline in revenue. This decline in consumption has continued despite our supply systems having high levels of security and the fact that there have been no restrictions. We have also reinforced the security of supply to our customers with positive messages communicating our ample levels of water supply. We have recognised that water demand is a major component in formulating this plan and are acutely aware of the importance of appropriate forecasting. As a result, substantial modelling has been completed, taking into account the various factors that affect customer demand. Based on this modelling, an average use of 130kL for residential customers and 550kL for typical non-residential customers has been adopted for the WP3 period.

We have also restructured our charges, with a decrease in the fixed water component and greater emphasis on the volume of water used. This means that by the end of WP3, we will achieve a 60:40 ratio for our customers' volumetric and fixed water charges, respectively. This is in direct response to customer feedback stipulating their desire to have more control over the size of their bill. Customers will also see a decrease in the fixed wastewater charge

over the WP3 period, as revenue is better aligned to the cost of providing the individual water and wastewater services.

From a customer's perspective, WP3 will result in a 1.66% real increase for average residential customers and 6.88% real increase for typical non-residential customers over the full five years. Notably, this will be achieved while still repaying an estimated \$5 million in borrowings over WP3, with the whole \$46 million in capital spend to be funded directly from operating cash flows.

Our plan focusses solely on the provision of core services to our customers and embodies a strong Board strategy to deliver value-for-money through charging the lowest prices possible through prudent investment and efficient operations.

3. Water Plan Overview

3.1. Introduction

EGW operates in a heavily regulated environment, and is constituted as a statutory not-for-profit Corporation. It is overseen by a skills based Board who report to the Minister of Water.

Under the Water Industry Regulatory Order (WIRO), EGW is required to submit a Water Plan to the Essential Services Commission (ESC) at the start of each five-year regulatory period. The ESC allows for the submission of a Water Plan for up to 10 years. Due to the level of uncertainty involved with a 10-year program, EGW is submitting a five-year Water Plan, concluding on 30 June 2018.

The ESC authorises the prices to be charged for EGW's services, which are determined through the application of the building block approach. This means EGW first defines service standards for delivery before the costs of delivering these services are identified, and finally, the amount of revenue to be recovered is calculated. The ESC must consider that the revenue requirement promotes efficiency whilst ensuring EGW remains financially viable.

The Water Plan 2 (WP2) period, concluding in June 2013, provided many challenges for EGW. The impact of climate, and in particular extreme weather events, reinforced the need for the organisation to be both adaptable and resilient. Significant portions of the water supply catchments were damaged by bushfires, unprecedented drought impacts on stream-flows were experienced, floods and extreme winds associated with significant storm events were a rolling set of opportunities for EGW to demonstrate its capabilities.

Within the context of the last five years, the development of WP3 provides an opportunity to review, reorganise and identify priorities for the pricing regime for the period from 2013-18. The focus has been on engaging with customers and then using this feedback to ensure the services delivered by EGW meet their expectations, both from a service level and value for money perspective.

EGW's strategy for WP3 is to:

- ④ provide the best value for customers while still delivering service outcomes;
- ④ minimise pricing pressures to customers through:
 - maximising the efficiency of existing networks;
 - productivity improvements;
 - innovation - where benefits outweigh costs;
 - cost minimisation;
- ④ ensure the financial stability of EGW is maintained.

3.2. Overview of Water Plan Process

EGW has undertaken substantial work in the development of WP3. This has been directly influenced by a number of strategic directives from the Board, to ensure WP3 meets the overarching strategic objectives. Delivering the greatest quality service to customers at a fair and reasonable cost is at the heart of this process.

EGW's WP3 journey is captured in Table 1.

Table 1: Water Plan 3 Process

Month	Activity	Notes
January 2012	<p>Customer consultation across the entire East Gippsland Region on:</p> <p>What is a Water Plan What we did in WP2 What we propose for WP3 for:</p> <ul style="list-style-type: none"> • capital works; • service standards; • operational spending; • Guaranteed Service Levels (GSLs); • what bills will look like; • moving to quarterly bills. 	<p>Consultation in:</p> <p>Bairnsdale, Paynesville, Bruthen, Buchan, Swan Reach, Lakes Entrance, Orbost, Cann River, Mallacoota and Omeo.</p>
February 2012	Board Strategic Session – WP3.	Discussion of all elements of the draft plan and customer feedback from consultation session in January as well as external reports on customers in Victoria and what they value.
April 2012	Draft WP3 is considered by the Board.	
May 2012	<p>Final draft WP3 is approved by the Board including 5 key fact sheets on:</p> <ul style="list-style-type: none"> • how charges work; • what the proposed bill will be; • major projects; • service standards and expenditure; • GSLs. 	<p>Draft plan goes public, associated media releases in local press, website, on customer bills and mail outs.</p> <p>Further feedback is invited from customers by phone, email, letter or in person.</p>

Month	Activity	Notes
June 2012	Public Board meeting canvassing WP3 and in particular the five key fact sheet areas. Face to face customer consultation sessions across the whole district on WP3.	Public Meeting held in Bairnsdale. Consultation also held in Mallacoota, Orbost, Lakes Entrance and Omeo on the draft plan.
August 2012	Board consideration of refined price options stemming from expenditure changes that were identified after the draft plan was released.	
September 2012	Board approval of final draft WP3.	
February 2013	ESC to release draft Water Plan decision to the public.	
February-April 2013	ESC to consult with East Gippsland Water customers.	Consultation on EGW's proposed plan and activities included in Bairnsdale.
May 2013	ESC releases final decision.	The plan becomes operational based on the ESCs final determination on 1 July 2013.

3.3. Services Provided by East Gippsland Water

EGW is responsible for water harvesting, transport, storage, treatment and distribution of water, as well as wastewater collection, treatment and reuse for urban and commercial/industrial customers throughout East Gippsland.

EGW provides water and wastewater infrastructure for the majority of the East Gippsland community, stretching from Bairnsdale through to the Victoria-New South Wales border and to the High Country of the Victorian Alps (see Figure 1).

Nine separate water supply systems benefit the communities of Bairnsdale, Bemm River, Bruthen, Buchan, Cann River, Dinner Plain, Eagle Point, Johnsonville, Lakes Entrance, Lake Tyers Aboriginal Trust, Lake Tyers Beach, Lindenow, Lindenow South, Mallacoota, Marlo, Metung, Newlands Arms, Newmerella, Nicholson, Nowa Nowa, Omeo, Orbost Paynesville, Raymond Island, Sarsfield, Swan Reach and Swifts Creek.

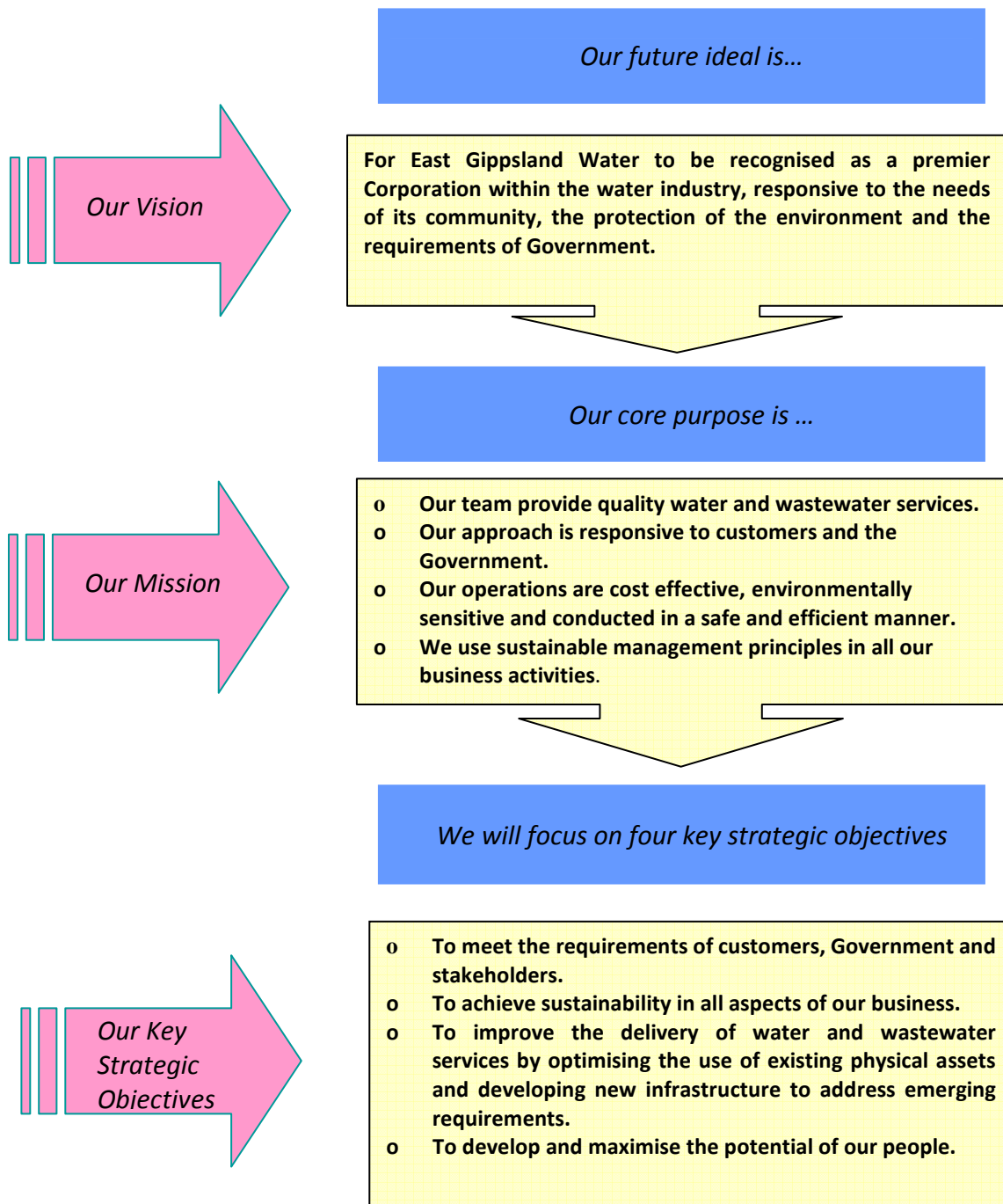
Eleven individual wastewater systems serve Bairnsdale, Bemm River, Bruthen, Cann River, Dinner Plain, Eagle Point, Johnsonville, Lakes Entrance, Lake Tyers Beach, Lindenow, Mallacoota, Marlo, Metung, Newlands Arm, Nicholson, Omeo, Orbost, Paynesville, Raymond Island and Swan Reach.



Figure 1: East Gippsland Water Service Area

3.4. Mission, Vision and Objectives

WP3 is based on achieving the strategic objectives the EGW Board has set in order to achieve its mission, and ultimately, vision.



3.5. Management of Risk to Strategic Objectives

The application of an integrated risk management approach has assisted EGW in achieving its strategic objectives over a number of years. This involves the identification of risks that would prevent EGW’s strategic objectives from being achieved, and the implementation of controls to mitigate those risks. This same approach has been applied to the development of WP3, by ensuring any actions or activities undertaken are aligned to achieving strategic objectives or managing risks to those objectives.

An example of this approach is shown in Figure 2 below. This looks at strategic objectives regarding people, in particular, their health and safety and working environment. The first risk profile is the risk before the implementation of controls, such as EGW’s independently accredited safety system, and the second following the implementation of controls.

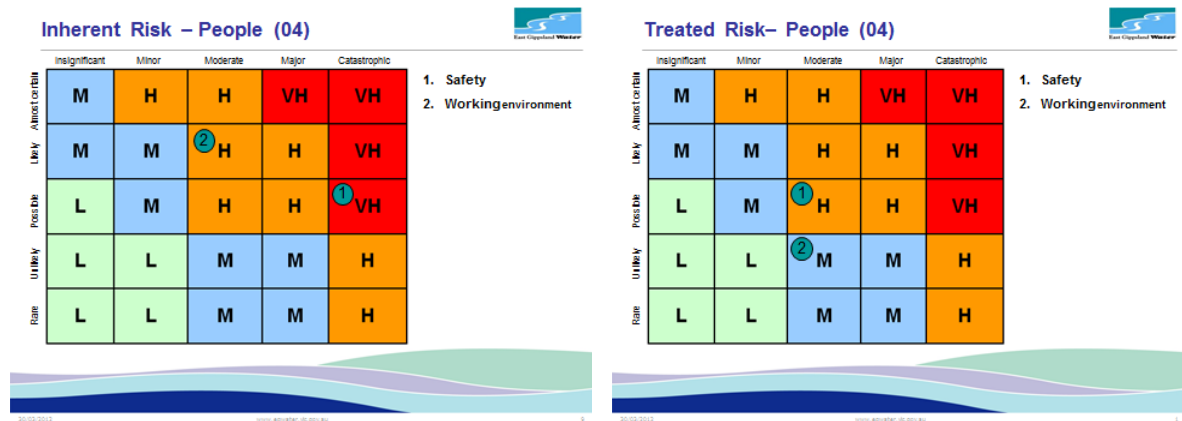


Figure 2: EGW Strategic Risk Profiles

Whilst the risk remains significant, it is because of the consequence, should a significant safety incident occur. However, the likelihood of such an event occurring is decreased due to the controls implemented. This approach has been applied to all aspects of the WP3 to ensure that any investment, capital or operational, is aligned to achieving strategic objectives or managing risks to those objectives.

4. Water Plan 2 Outcome Summary

4.1. Introduction

A significant reduction in customer demand for water was evident during the WP2 period, impacting on revenue. Despite this, the strategic priorities identified in WP2 have all been achieved. In particular, a strong focus on preventative maintenance of EGW's water and sewer networks ensured that there were fewer unplanned interruptions to the supply of high quality drinking water, improved water quality for customers and more reliable sewer services with fewer blockages.

During WP2 EGW also embarked on a number of significant capital projects to ensure it could continue to meet service standards to customers now, and into the future. EGW customers can be confident that they will have a secure, high quality, reliable and sustainable water supply, which is evidenced by the lack of water restrictions in the region in the past five years, despite extreme dry conditions.

The Water Supply Demand Strategies (WSDS) were developed for each supply system during the WP2 period. These strategies forecast water system security for the next 50 years and made recommendations regarding further water security initiatives, which are being implemented accordingly.

4.2. Service Standard Performance Measures

Over the WP2 regulatory period, overall performance was better than the industry average, with almost all standards met or exceeded. EGW set appropriate standards and endeavour to provide a high level of service to customers which reflected in the results achieved.

Midway through the period, a more proactive approach to maintenance resulted in greater planned maintenance on EGW's networks; including root cutting, pipe inspection work, valve installation and pipe cleaning. This work benefits the customers now, and in the future, as well as reducing long term operational costs. This preventative work impacted slightly on the number of customer minutes off supply due to planned works, but provided significant benefits in terms of both the number and duration of unplanned interruptions. This approach will continue into WP3, with the proposed targets and outcomes reflective of increased planned works and reduced reactive work.

Table 2 shows Water Plan 1 (WP1) and WP2 targets and results.

Table 2: Water Plan 1 and 2 Service Level Targets and Results

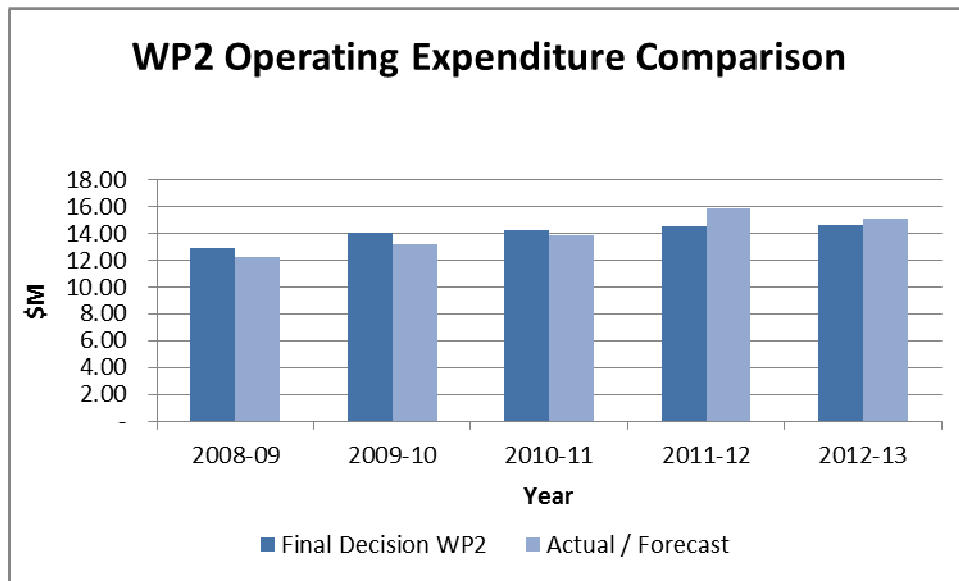
Details	Water Plan 1 Targets		Water Plan 2 Targets				Actual					
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Water												
Unplanned water supply interruptions (per 100km)	12.25	11.5	10	10	10	10	20	21	15	16	18	6.98
Average time taken to attend bursts and leaks (priority 1) (minutes)	80	80	30	30	30	30	-	-	-	-	-	30
Average time taken to attend bursts and leaks (priority 2) (minutes)	85	85	36.2	36.2	36.2	36.2	27	24	30	34	28	80
Average time taken to attend bursts and leaks (priority 3) (minutes)	-	-	61.1	61.1	61.1	61.1	31.84	52.96	67.24	133.08	36.29	42.5
Average time to rectify bursts & leaks priority 1	-	-	-	-	-	-	-	-	-	-	-	3270
Average time to rectify bursts & leaks priority 2	-	-	-	-	-	-	150.7	140.4	317.7	294.9	287.7	290
Average time to rectify bursts & leaks priority 3	-	-	-	-	-	-	693.05	2130.8	2502.25	1968.98	1557.1	1692
Number of customers receiving 1 unplanned water supply interruptions in the year	-	-	1700	1700	1700	1700	2715	2395	2204	1524	1697	1306
Number of customers receiving 2 unplanned water supply interruptions in the year	-	-	442	442	442	442	878	531	144	201	55	95
Number of customers receiving 3 unplanned water supply interruptions in the year	-	-	30	30	30	30	482	56	13	39	26	0
Number of customers receiving 4 unplanned water supply interruptions in the year	-	-	26	26	26	26	131	40	7	20	0	0
Number of customers receiving 5 unplanned water supply interruptions in the year	-	-	5	5	5	5	20	0	0	0	0	0
Number of customers receiving more than 5 unplanned water supply interruptions in the year	0	0	0	0	0	0	0	0	0	0	0	0
Planned water supply interruptions restored within 5 hours (%)	95	95	95	95	95	95	98%	95%	98%	100%	98%	95.9%
Planned water supply interruptions not restored within 5 hours (per 100 customers)	-	-	-	-	-	-	0.104	0.48	0	0	1.07	0.608
Average unplanned customer minutes off water supply	8.6	8.5	14.2	14.2	14.2	14.2	25.63	11.44	12.47	6.09	5.34	1.96
Average planned customer minutes off water supply	7.5	7	10.3	10.3	10.3	10.3	19.65	15.43	10.6	31.6	53.8	5.89
Average unplanned frequency of water supply interruptions	0.09	0.08	0.1	0.1	0.1	0.1	0.10	0.15	0.10	0.085	0.088	0.06
Average planned frequency of water supply interruptions	0.06	0.05	0.1	0.1	0.1	0.1	0.21	0.21	0.11	0.205	0.297	0.24
Average duration of unplanned water supply interruptions (minutes)	92	90	125.9	125.9	125.9	125.9	121.50	77.00	109.10	72.10	60.10	94.90
Average duration of planned water supply interruptions (minutes)	160	140	114.6	114.6	114.6	114.6	187.99	73.00	107.00	154.00	181.00	171.10
Unaccounted for water (%)	17	16	13	12.2	11.4	11	13	13.74	8.5	16.7	17.3	17
Sewerage												
Sewerage blockages (per 100km)	16.89	16.79	18.9	18.9	18.9	18.86	16	15	17	15.5	9	2.7
Average time to attend sewer spills and blockages (minutes)	53	52	30.2	30.2	30.2	30.15	24.2	36.6	17.1	26.68	38.3	29.31
Average time to rectify a sewer blockage (minutes)	67	66	76.94	76.94	76.9	76.94	220.4	87.9	75.4	85.5	55.4	54.12
Spills contained within 5 hours (%)	100	100	100	100	100	100	87	100	98	100	96	100
Sewer spills from reticulation and branch sewers (priority 1 and 2) (No. spills)	-	-	-	65	65	65	60	60	62	50	50	25
Customers receiving one sewer blockages in the year	98	97	98	98	98	98	1483	282	162	100	33	18
Customers receiving more than 3 sewer blockages in the year	0	0	0	0	0	0	4	0	0	0	0	0
Sewer spills to customer properties (No. spills)	-	-	-	-	-	-	22	32	26	21	16	8
Sewer spills to customer properties (per hundred properties)	-	-	-	-	-	-	0.14	0.2	0.15	0.13	0.09	0.044
Sewer spills to customer properties restored within 5 hours (No. spills)	-	-	-	-	-	-	12	32	26	21	16	8
Sewer spills within a house (No. spills)	-	-	-	-	-	-	0	0	0	2	0	2
Sewer spills within a house responded to within 1 hour (No. spills)	-	-	-	-	-	-	n/a	n/a	n/a	2	n/a	2



Details	Water Plan 1 Targets		2008/09	Water Plan 2 Targets			2006/07		Actual		2009/10		2010/11		2011/12	
	2006/07	2007/08		2009/10	2010/11	2011/12	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12				
Customer Service																
Complaints to EWOV (per 1000 customers)	0.6	0.6	0.6	0.6	0.6	0.6	0.084	0.064	0.072	0.062	0.097	0.01				
Telephone calls answered within 30 seconds (%)	96	96	96	96	96	96	95	95	96	96	95	96				
Additional Service Standards																
Unplanned water supply interruptions restored within 3 hours (%)	-	91.7	91.7	91.7	91.7	91.69	90.2	94	91	97	93.6	94				
Unplanned water supply interruptions restored within 5 hours (%)	-	97.5	97.5	97.5	97.5	97.5	98.1	99	94	100	96.2	98.4				
Unplanned water supply interruptions restored within 12 hours (%)	-	99.3	99.3	99.3	99.3	99.3	98.1	100	98.2	100	100	100				
Unplanned water supply interruptions not restored within 5 hours (per 100 customers)	-	-	-	-	-	-	0.015	-	-	-	0.242	0.242				
Number customer interruptions in peak hours planned	-	-	-	-	-	-	1081	233	0	365	745	136				
Number customer interruptions in peak hours unplanned	-	-	-	-	-	-	1201	1104	310	580	443	519				
Total CO ₂ emissions (tonnes)	7900	7800	7800	7700	7600	8400	7926.6	7973	8525	8755	8687	8436				
Recycled water target (%)	100	100	100	100	100	100	100	100	100	100	99.3	90				
Biosolids reuse (%)	100	100	100	100	100	100	0	0	0	0	81.6	0				
Sewer backlog connections (No.)	45	25	16	8	0	8	100	100	100	100	100	100				
Environmental discharge indicator (% compliance)	100	100	100	100	100	100	84	81	100	100	100	100				
Drinking water quality indicators (% compliance)	100	100	100	100	100	100	95	100	100	100	100	100				
Complaints received by business total per 100 customers	0.6	0.6	0.6	0.6	0.6	0.6	0.78	0.6	0.73	0.341	0.405	0.205				
Water quality complaints (No.)	-	-	-	-	-	-	43	31	27	22	25	7				
Water supply reliability complaints (No.)	-	-	-	-	-	-	4	2	7	3	0	1				
Sewerage service quality & reliability complaints (No.)	-	-	-	-	-	-	26	23	40	3	24	1				
Affordability complaints (No.)	-	-	-	-	-	-	5	3	0	33	3	10				
Billing complaints (No.)	-	-	-	-	-	-	18	9	4	0	0	10				
Pressure complaints (No.)	-	-	-	-	-	-	11	10	20	1	9	2				
Sewage odour complaints (No.)	-	-	-	-	-	-	1	2	5	5	9	4				
Other complaints (No.)	-	-	-	-	-	-	48	42	49	24	17	10				

4.3. Operational Expenditure

The expected WP2 operational expenditure budget was a total of \$68.2 million. Actual expenditure (including the forecast for 2012-13) was \$73.8 million, meaning EGW has spent \$5.6 million more than budgeted over the WP2 period (see Graph 1).



Graph 1: Water Plan 2 Operating Expenditure

Table 3 shows the actual differences per year. The major differences can be attributed to:

- Ⓐ staffing increases over the Plan to cater for increased regulation and compliance activities;
- Ⓐ defined benefits superannuation calls in 2010/11 and 2011/12;
- Ⓐ responses to natural disasters across the district;
- Ⓐ rising electricity and fuel costs.

Table 3: Actual Operating Expenditure versus Benchmark for WP2

\$ million in January 2013 prices					
	2008-09	2009-10	2010-11	2011-12	2012-13
Benchmark Operating Expenditure	12.87	12.98	13.90	14.25	14.22
Actual Operating Expenditure	14.13	14.25	14.54	15.83	15.06
Variation	(1.26)	(1.27)	(0.63)	(1.58)	(0.85)

Over the WP2 period EGW embarked on a significant capital expenditure program resulting in increased operational costs to support and maintain the new infrastructure. This was coupled with increased levels of compliance and regulation drawing significant resources. From WP3 onwards however, EGW will move into a maintenance phase, and accordingly, can keep price increases marginal while upholding service standards.

4.4. Capital Expenditure

In WP2 a \$66.4 million (net real) expenditure on capital was forecast. At the end of the WP2 period it is expected that EGW will have invested \$65.5 million. This is an overall saving of \$0.9 million (or 1.4%) when compared to the proposed expenditure. This was achieved whilst delivering more projects than originally forecast.

The changes from the original program included:

- Ⓢ cancellation of the Toorloo water treatment plant, which is no longer required due to a number of water storage upgrades as well as other water quality improvements implemented across the Mitchell water supply system;
- Ⓢ postponement of an alternative irrigation scheme at Dinner Plain until WP3 to allow other reuse options to be investigated;
- Ⓢ the Woodglen water treatment plant being delivered below budget.

These savings, along with the successful attraction of external funding, have enabled EGW to undertake a number of additional projects to improve water security and environmental outcomes in the region.

Major projects that have been completed (or will be completed by the end of June 2013) are listed below. The projects reiterate EGW's commitment to developing reliable, secure and high quality drinking water supply as well as efficient and environmentally sustainable sewerage services for all customers:

- Ⓢ construction of a treatment facility at Woodglen to ensure high quality and reliable water supplies for the Mitchell system, \$12.5 million;
- Ⓢ construction of a 790 megalitre (ML) raw water storage at Woodglen to support the Mitchell River water supply system, \$9 million;
- Ⓢ construction of a reticulated sewerage system at Bemm River, including collection, treatment and reuse, \$4.6 million (additional);
- Ⓢ upgrade of trunk mains for Eagle Point and Nicholson to ensure security of supply, \$3.9 million;
- Ⓢ lining and covering of storages at Wy Yung and Sunlakes to maintain high quality water throughout the Mitchell River water supply system and reduce losses from evaporation, \$2.7 million (additional);
- Ⓢ replacement of open storages at Eagle Point and Sarsfield with covered tanks to maintain high quality water and reduce losses from evaporation, \$3.4 million.
- Ⓢ expansion of the irrigation capacity of the Metung wastewater treatment site to reuse increased wastewater volumes, \$1.8 million;
- Ⓢ water and wastewater services provided to the Tambo Bluff Estate, \$3.5 million;
- Ⓢ provision of reticulated sewerage to Banksia Peninsula, \$1.6 million;
- Ⓢ replacement of ageing and failing water network assets to meet service standards, \$1.4 million;
- Ⓢ 10ML raw water storage at Omeo to support long-term water security, \$0.9 million;

- Ⓒ construction of bores to improve security of water supply to Mallacoota, \$0.5 million (additional);
- Ⓒ injection and recovery of water from the deep aquifer to improve security of supply for Mitchell River water supply system (additional);
- Ⓒ covering a raw-water basin at Mallacoota and installation of a shade cloth to improve water quality and reduce losses from evaporation, \$0.4 million (additional);
- Ⓒ Lake Tyers Aboriginal Trust sewerage system upgrade, \$3 million.

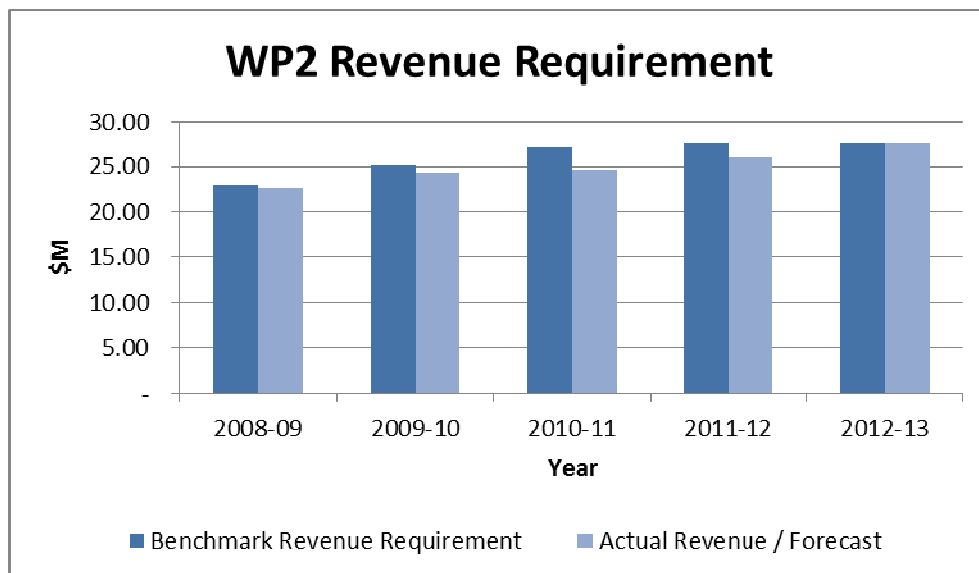
4.5. Revenue Requirement

EGW's revenue requirement and actual revenue are shown in Table 4 and Graph 2. Overall, EGW received a total of \$5.68 million less revenue than the forecast revenue for WP2. This is directly related to the drop in demand for water that has been seen since the start of WP2.

Table 4: Revenue Requirement versus Actual Revenue for WP2

\$ million in January 2013 prices

	2008-09	2009-10	2010-11	2011-12	2012-13
Benchmark Revenue Requirement	22.91	25.19	27.21	27.72	27.76
Actual Revenue	22.64	24.29	24.59	25.96	27.63
Variation	(0.27)	(0.91)	(2.63)	(1.76)	(0.12)



Graph 2: Revenue Requirement versus Actual Revenue for WP2

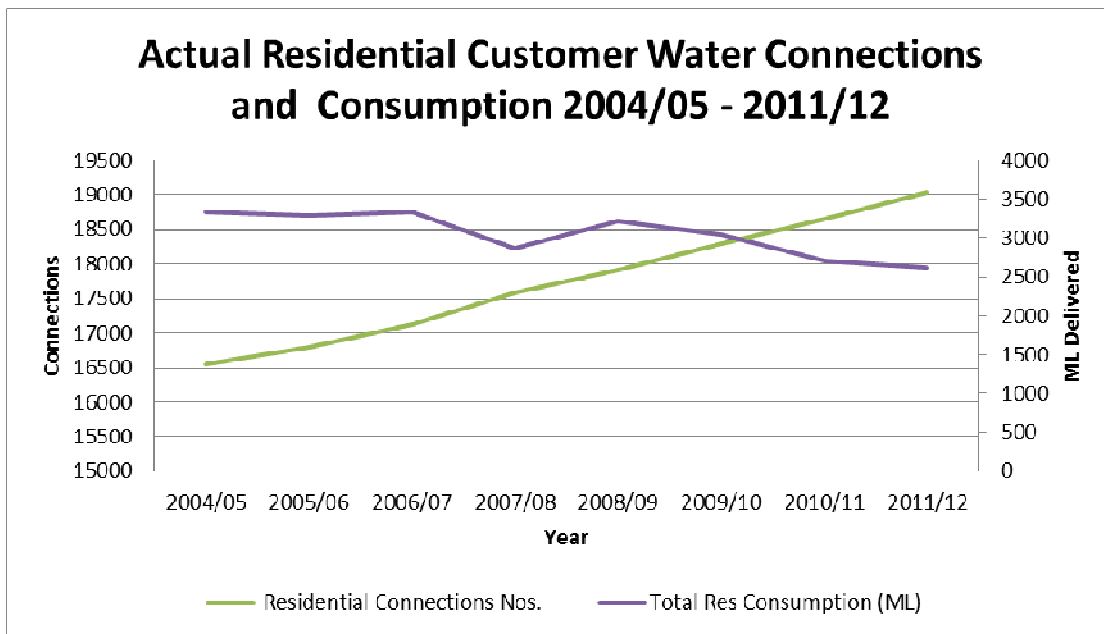
4.6. Demand

Customer demand has significantly reduced across WP2. The average residential customer in 2012 uses only 138,000 litres (L) of water per year compared to 180,000L in 2008.

The impact of this decrease in water use has resulted in a reduction in revenue of over \$5.8 million over the five years of WP2 (see Section 4.5). This is a significant reduction and EGW

has mitigated this impact by increasing staff focus on operational spending, increasing overall network efficiency and actively seeking external funding.

EGW firmly believe that water use has not reached its lowest point. This is best demonstrated in Graph 3, showing the residential customer demand continuing to drop even with increases in connection numbers.



Graph 3: Residential Water Consumption and Connections from 2004/05

This should also be considered in the context that 89% of the customer base is residential, using over 60% of the water supplied. EGW have attributed this reduction to changes in customer water-use behaviours and the investment many customers have made in water efficient technologies. It is therefore anticipated that no rebound will occur in the short- to medium-term and this has been budgeted accordingly in WP3.

4.7. Prices

EGW’s prices were the same as those set out in the price determination for WP2. No adjustment was sought to reflect the revenue lost through significantly reduced water sales.

5. Service Standards for WP3

5.1. Introduction

EGW is committed to delivering high quality, value for money services to its customers over WP3. While many service standards and outcomes are driven by obligations from government and regulatory agencies, EGW have used customer input, feedback and surveys from community consultation sessions to validate the service standards. To improve standards further would require additional resources and impact on costs for little benefit to service.

5.2. Regulatory and Government Obligations

The regulatory and Government obligations for EGW are summarised in Table 5.

Table 5: Service Obligations from Regulatory Agencies and the Government

Act/legislation/document	Service outcomes
<i>Water Act 1989</i>	<i>To provide water and sewerage services to customers.</i>
<i>Statement of Obligations</i>	<i>Direction on operations as set down by the Minister for Water.</i>
<i>EGW Customer Charter</i>	<i>Commitments to customers regarding the provision of service, including standards and conditions of supply for prescribed services.</i>
<i>Environment Protection Act 1970 and State Environmental Protection Policies</i>	<i>Setting out environmental requirements that EGW is obliged to address.</i>
<i>Safe Drinking Water Act 2003 and Safe Drinking Water Regulations 2005</i>	<i>Sets required drinking water quality standards and risk management requirements for water-supply systems, including the disclosure of relevant information.</i>

These standards and outcomes reflect obligations imposed by regulators, such as the Environment Protection Authority (EPA), the Department of Health (DoH) and the Department of Sustainability and Environment (DSE), as well as those reflected in the Statement of Obligations from the Minister for Water.

5.2.1. Drinking water quality

EGW monitor and manage the quality of drinking water supplied to customers to ensure it has high health, aesthetic and economic values. The independent audit of EGW's Drinking Water Quality Risk Management System and compliance with the Safe Drinking Water Act and regulations will be maintained during WP3 via operational and capital expenditure.

5.2.2. Environmental performance

EGW will continue to meet regulatory requirements, such as directed in legislation and the Statement of Obligations, while striving for industry best practice in environmental performance. The capital and operational programs included in WP3 include expenditure to achieve this goal and meet regulatory requirements.

5.3. Core Service Standards

The ESC provides all water businesses with a set of performance indicators they must report against. The performance indicators were set in 2008 at the start of WP2 and reviewed recently by the ESC for inclusion in WP3. The indicators promote efficiency and consistency across the Victorian water businesses. Some are derived directly from the National Water Commission and the ESC collects the information on their behalf.

The review of the performance indicators by the ESC resulted in the removal of 11 indicators, modification of 8 indicators, clarification of 16 indicators and the addition of 5 new indicators.

The indicators provided by the ESC provide the basis for the core service standards that EGW will deliver over WP3. Table 7 sets these out for the WP3 period. These performance targets reflect the average performance over the previous five years unless particular reasons for change are identified. Justification and detail behind all of the targets is included as at **Appendix 1**.

The rationale for setting the proposed service standards includes:

- ④ historical performance and the desire for continual improvement;
- ④ feedback from customer consultation;
- ④ adjustment for changes in the operating environment;
- ④ assessment of capital and operating expenditure required to achieve the targets, i.e. cost and price trade-off versus value to the customer.

5.3.1. Service standards and targets

The EGW Customer Charter defines service standards for minimum flow rates, water/sewerage services and related expectations. The performance results of the last five years demonstrate EGW provides a high level of service to customers. This was supported by customer feedback from the consultation sessions, where a high level of satisfaction with the level of service provided by EGW was expressed.

To significantly improve existing service levels would require additional resources and expenditure for very little additional customer value. However, some alterations from targets in WP2 have been proposed. The community consultation sessions and surveys were used to discuss these changes with customers and ensure this matched their desired outcomes.

The minimum flow rates are specified for various sized meters connected to the EGW network. Table 6 contains the specified flow rates in litres per minute (L/min).

Table 6: Minimum Flow Rates for each Meter Size

Meter size	20mm	25mm	32mm	40mm	50mm
Flow rate (L/min)	20	35	60	90	160

Service standards for WP3

Table 7 contains the full set of performance standard targets for WP3.

New service standards for WP3

EGW proposes to adopt four of the five new service standards for WP3. The fifth service standard is not relevant to EGW's operations. New indicators are presented in Table 8.

There are also seven new indicators that are proposed for further investigation by the ESC. EGW will await further advice before any action is taken to incorporate these proposed indicators which are presented in **Appendix 1**.

Definitions for all indicators can be sourced from the **Essential Services Commission Review of Water Performance Report Indicators – Final Report, August 2012**.

Table 7: Performance Standard Targets WP3

Details	Average Last 5 years	WP3 Proposal				
		2013/14	2014/15	2015/16	2016/17	2017/18
Water						
Unplanned water supply interruptions (per 100km) all priorities	9.4	10.0	10.0	10.0	10.0	10.0
Average time taken to attend bursts and leaks (priority 1) (minutes)	0	30	30	30	30	30
Average time taken to attend bursts and leaks (priority 2) (minutes)	29	34	34	34	34	34
Average time taken to attend bursts and leaks (priority 3) (minutes)	67	80	80	80	80	80
Average time to rectify bursts & leaks priority 1 (minutes)	0	120	120	120	120	120
Average time to rectify bursts & leaks priority 2(minutes)	268	270	270	270	270	270
Average time to rectify bursts & leaks priority 3 (minutes)	1938	1800	1800	1800	1800	1800
Number of customers receiving 1 unplanned water supply interruptions in the year	1825	1800	1700	1650	1650	1600
Number of customers receiving 2 unplanned water supply interruptions in the year	205	200	200	200	200	200
Number of customers receiving 3 unplanned water supply interruptions in the year	27	30	30	27	27	27
Number of customers receiving 4 unplanned water supply interruptions in the year	13	15	15	15	15	15
Number of customers receiving 5 unplanned water supply interruptions in the year	0	0	0	0	0	0
Number of customers receiving more than 5 unplanned water supply interruptions in the year	0	0	0	0	0	0
Planned water supply interruptions restored within 5 hours (%)	97%	98%	98%	99%	99%	99%

Details	Average Last 5 years	WP3 Proposal				
		2013/14	2014/15	2015/16	2016/17	2017/18
Water						
Planned water supply interruptions not restored within 5 hours (per 100 customers)	3	3	3	3	3	3
Average unplanned customer minutes off water supply	7	7	7	7	7	7
Average planned customer minutes off water supply	28	28	28	28	28	28
Average unplanned frequency of water supply interruptions	0.10	0.10	0.10	0.10	0.10	0.10
Average planned frequency of water supply interruptions	0.33	0.30	0.30	0.30	0.30	0.30
Average duration of unplanned water supply interruptions (minutes)	78	75	75	75	75	75
Average duration of planned water supply interruptions (minutes)	136	170	170	165	165	165
Unaccounted for water (%)	15	13	12	11	10	10
Sewerage						
Sewerage blockages (per 100km)	12	15	15	15	15	15
Average time to attend sewer spills and blockages (minutes)	40	40	40	40	40	40
Average time to rectify a sewer blockage (minutes)	83	80	80	80	80	80
Spills contained within 5 hours (%)	99	100	100	100	100	100
Customers receiving 3 + sewer blockages in the year	0	0	0	0	0	0
Sewer spills to customer properties (No. spills)	23	21	21	21	21	21
Sewer spills to customer properties (per 100 properties)	0.13	0.13	0.13	0.13	0.13	0.13
Sewer spills to customer properties restored within 5 hrs. (No. spills)	23	21	21	21	21	21

Details	Average Last 5 years	WP3 Proposal				
		2013/14	2014/15	2015/16	2016/17	2017/18
Sewerage						
Sewer spills within a house (No. spills)	0.8	1	1	1	1	1
Sewer spills within a house responded to within 1 hour (No. spills)	0.8	1	1	1	1	1
Customer Service						
Complaints to EWOV (per 1000 customers)	0.06	0.06	0.06	0.06	0.06	0.06
Telephone calls answered within 30 seconds (%)	96	96	96	96	96	96
Additional Service Standards						
Unplanned water supply interruptions restored within 3 hours (%)	83	80	80	80	80	80
Unplanned water supply interruptions restored within 5 hours (%)	98	98	98	98	98	98
Unplanned water supply interruptions restored within 12 hours (%)	100	100	100	100	100	100
Unplanned water supply interruptions not restored within 5 hours (per 100 customers)	1	1	1	1	1	1
Number customer interruptions in peak hours planned	249	250	250	250	250	250
Number customer interruptions in peak hours unplanned	182	182	182	182	182	182
Total CO ₂ emissions (tonnes)	8493	8500	8420	8350	8270	8190
Recycled water target (%)	98	100	100	100	100	100
Available biosolids reuse (%)	16	100	100	100	100	100
Environmental discharge indicator (% compliance)	100	100	100	100	100	100

Details	Average Last 5 years	WP3 Proposal				
		2013/14	2014/15	2015/16	2016/17	2017/18
Drinking water quality indicators (% compliance)	100	100	100	100	100	100
Complaints received by business total per 100 customers	0.48	0.48	0.48	0.48	0.48	0.48
Water quality complaints (No.)	12	12	12	12	12	12
Water supply reliability complaints (No.)	3	3	3	3	3	3
Sewerage service quality & reliability complaints (No.)	24	24	24	24	24	24
Affordability and billing complaints (No.) (previously counted individually)	4	4	4	4	4	4
Flow rate complaints (No.) (previously pressure)	9	5	5	5	5	5
Sewage odour complaints (No.)	5	5	5	5	5	5
Other complaints (No.)	28	17	17	17	17	17

Table 8 New Indicators for Water Plan 3

Details	Water Plan 3 Proposal				
	2013/14	2014/15	2015/16	2016/17	2017/18
GSL Payments (No.) - Number of payments made against GSLs	54	48	43	39	38
Website mystery shopper – Mystery shoppers engaged to rank the ease of website manoeuvring and quality of information	No guidance has been provided by the ESC. Targets will be established in the final determination.				
Physical visit (No.) – Number of physical visits associated with hardship GSL management	5	5	5	5	5
Trade waste customers with agreements containing specific acceptance data	4	4	4	4	4

5.4. Guaranteed Service Levels

GSLs are proposed by EGW for the WP3 period. EGW will make a payment to a customer in an instance where performance does not meet the defined service level. The primary purpose is to provide an incentive for us to improve key aspects of service rather than focus on compensating affected customers. Customers were consulted on these GSLs in the customer consultation sessions as well as the related payments/rebate amounts. Customers were comfortable with the GSLs and payments proposed.

EGW places high importance on monitoring and reporting its service standard performance levels. The Board reviews service standard performance on a monthly basis via the key performance reporting processes and places considerable emphasis on meeting the targets.

Proposed Guaranteed Service Levels

The following GSLs are proposed for WP3:

1. customers who write to East Gippsland Water about any matter that requires a response will receive a response within 10 working days. If we fail to do this a rebate of \$30 will be applied to the customer's bill;
2. East Gippsland Water provides notice to customers of any planned interruption to their water supply, which gives the timeframe for when water will be unavailable. If a customer is affected by a planned interruption by having no water supply for longer than the time set in the notice, and notifies us of their issue, a rebate of \$65 will be applied to the customer's bill;
3. East Gippsland Water has significant hardship procedures in place. If a residential customer is having difficulty paying a bill, and East Gippsland Water restricts water supply, or takes legal action against the customer before taking reasonable action to provide information about these procedures, a rebate of \$300 will be applied to the customer's bill;
4. if East Gippsland Water employees fail to update a customer's billing details after the customer has requested such a change in the required form, a rebate of \$30 will be applied to the customer's bill;
5. if East Gippsland Water causes a sewage spill within a customer's house, we will pay the customer \$1000, providing the flooding has not been contributed to by the customer's own actions (a defect in their house drain/blocked overflow relief gully) or as a result of widespread flooding due to extreme weather. We will also clean up the property and provide alternative accommodation as required.

EGW believe that these are the service standards that inconvenience customers or adversely impact them more than any others, purely due to their consequences and frustration involved.

The following exclusions apply to these GSLs:

1. Where a property or house is occupied by a tenant and the tenant is a customer, only the tenant's account will be credited for the failure to meet GSLs 2 and 5;
2. If the event is caused by, or is the responsibility of the customer or a third party.

5.5. Customer Consultation

Customer consultation was a key focus for EGW in the creation of WP3. EGW's aim was to consult more broadly than occurred for WP2, providing all customers with an opportunity to comment on the draft WP3.

Although formal consultation assisted with the development of the plan, valuable insights into customer expectations and values are often gathered informally through direct feedback as the majority of staff live in the communities serviced.

During the consultation process various communication activities were conducted as detailed below.

5.5.1. Regional customer consultation meetings

A number of consultation sessions (15) were held across the region to gather customer input for the Draft Plan, and again following the release of the final draft WP3.

To encourage customer participation, and to demonstrate EGW's commitment to the consultation process, all sessions were held outside of normal business hours (7:00 - 9:00 pm).

Each workshop was allocated two hours with management providing an overview of the proposals regarding water supply and wastewater service levels and targets, structure of prices and bills and GSLs. Customers were provided the opportunity to ask questions, clarify issues and raise any gaps they considered important.

For customers who were unable to attend the workshops, a written feedback form was made available.

A strong sample of the local region was represented over the consultation process, with participant ages ranging from 30 to 75, including retirees, urban and semi-rural customers, commercial businesses, local media as well as low and fixed income earners.

Initial customer consultation sessions were held across the whole region with locations and dates shown on the following page:

Venue (and areas represented)	Date (2012)
Swan Reach Primary School (for Swan Reach, Johnsonville, Metung)	10 January
Bairnsdale RSL (for Bairnsdale, Wy Yung, Lucknow, Eastwood, Lindenow, Lindenow South, Nicholson)	11 January
Paynesville Community Centre (for Paynesville, Eagle Point, Newlands Arm, Raymond Island)	12 January
Bruthen Mechanics Hall (for Bruthen, Wiseleigh, Sarsfield)	17 January
Omeo Hall (for Omeo, Swifts Creek, Dinner Plain)	18 January
Lakes Entrance Mechanics Hall (for Lakes Entrance, Kalimna, Lake Tyers Beach, Lake Tyers Aboriginal Trust, Lake Bunga, Nowa Nowa)	19 January
Buchan Neighbourhood House (for Buchan)	24 January
Orbost Football Club Rooms, Lochiel Park (for Orbost, Newmerella, Marlo, Bemm River)	24 January
Cann River Community Hall (for Cann River)	31 January
Mallacoota Mud Brick Building (for Mallacoota)	31 January

Following consultation sessions, all customer feedback was consolidated and fed in to the draft WP3. To verify that customer expectations had been met, EGW consulted again on the composition of the draft WP3 in five major regional centres following its release as listed below:

Bairnsdale	20 June 2012
Lakes Entrance	26 June 2012
Mallacoota	25 June 2012
Omeo	26 June 2012
Orbost	25 June 2012

A highlight of the consultation sessions was the opportunity for customers to meet the entire EGW Board in Bairnsdale for the presentation of the draft plan in Bairnsdale on 20 June 2012. Board members also attended nearly every initial consultation session in January, to meet customers and gain further insights into their values and needs.

All customers who participated gave high value feedback. Many of the key themes replicated those that arose during a statewide Victorian project that aimed to assess customer values, and needs of their water and wastewater providers. This project involved nine focus groups across the state (including one in Bairnsdale) and surveyed more than 1000 customers.

5.5.2. WP3 Fact sheets

With the intent of presenting the draft plan in a way that was clear and understandable, EGW selected five key themes that arose during customer consultation and presented these in short fact sheets. The fact sheets covered the following topics:

Your Bill	Customers take control of their costs as water bills stay the same
Charges	What does East Gippsland Water charge me for?
Major Projects	Prudent major works program delivers for customers
Expenditure and Service	How do we cover the cost of our services?
Guaranteed Levels of Service	New guarantees compensate customers if poor service occurs

Examples of the customer fact sheets are provided below:

MAJOR PROJECTS
(DRAFT WATER PLAN 3, 2013 - 2018)

Prudent major works program delivers for customers

East Gippsland Water will spend around \$9 million a year on essential major works from 2013 to 2018 under its new water plan, Water Plan 3.

Prudent expenditure on major projects is necessary to ensure our customers can use as much water as they wish from a consistent, high quality supply. It also makes sure customers have a reliable and consistent wastewater removal and treatment service.

The projects are all planned to meet the requirements and challenges of maintaining ageing infrastructure, regulatory compliance as well as maintaining and improving provision of services to our customers.

Each major project has been assessed to ensure it contributes to reducing the risk to the strategic objectives of the organisation or to maintain existing controls that reduce risk.

Below is a map of areas where major projects will occur across East Gippsland:

The major capital projects for the 5 year Water Plan 3 period will include:

- Progressing a major upgrade to Bairnsdale Wastewater Treatment Plant. The current plant is old and nearly at the end of its life, and upgrade is required to ensure the plant meets operational, performance and environmental requirements. Upgrading the plant will make sure the treatment plant is reliable, effective and efficient, and will meet future needs.
- Upgrades to Bairnsdale and Lakes Entrance sewer networks: we need to upgrade critical sewer pipes and pump stations throughout Bairnsdale and Lakes Entrance. These upgrades will ensure we meet minimum service standards to our customers and the environment, and have enough capacity for existing and new customers.
- Water network renewals in towns across East Gippsland: replacement of ageing water pipes will ensure we meet minimum service standards to our customers, have enough capacity to serve existing and new customers and ensure we do not allow our assets to fall into disrepair, which would cost more money for operation and maintenance.

For more information –
www.egwater.vic.gov.au
Ph: 1800 871 841
Email: egw@egwater.vic.gov.au

CHARGES
(DRAFT WATER PLAN 3, 2013 - 2018)

What does East Gippsland Water charge me for?

Water service tariff
The water service tariff is a fixed charge that reflects the cost of making water available to your property.

The money is spent on operating, maintaining and upgrading the water supply network that delivers water to your property, including water mains (pipelines), main treatment plants, pump stations and meters.

This helps to ensure you receive a high-quality and reliable supply of drinking water. The tariff is a set yearly amount that is applied each day of the year.

Water usage tariff
The water usage tariff, known as the volumetric charge, is variable and reflects the amount of water you use.

Over the next five years, East Gippsland Water will give you more control over the size of your bills by increasing the water usage portion of your bill and decreasing the fixed water service charge.

This means customers who use less water will pay lower bills, with the freedom to use water for whatever purpose they choose.

The water usage tariff is calculated as a set dollar rate per kilolitre used (KL, or kilolitre = 1,000 litres) and is added to the water service tariff to give the total water charge.

This money is spent on operating, maintaining and upgrading the water supply network.

Wastewater service tariff
Where wastewater services are provided by East Gippsland Water, this tariff is added to the bill.

The wastewater service tariff is a fixed tariff that reflects the cost of making sewerage services available to your property.

The money is spent on maintaining the sewerage network, including sewer mains (pipelines), pump stations, treatment plants and facilities that allow treated wastewater to be reused to benefit the environment.

For more information –
www.egwater.vic.gov.au
Ph: 1800 871 841
Email: egw@egwater.vic.gov.au

GUARANTEED LEVELS OF SERVICE
(DRAFT WATER PLAN 3, 2013 - 2018)

New guarantees compensate customers if poor service occurs

Customers who receive a significantly poor level of service will be compensated as part of East Gippsland Water's new five-year water plan.

The five guaranteed service levels proposed in Water Plan 3 provide an incentive for our business to ensure that customers receive high standards of service.

We will guarantee customer service in the following five areas:

- For customers who write to East Gippsland Water about any matter which requires a response, they can expect this response within 10 working days.
- If we fail to do this a rebate of \$30 will be applied to the customer's bill.
- East Gippsland Water provides notice to customers of any planned interruption to their water supply, which gives the timeframe for when water will be unavailable.
- If a customer is affected by a planned interruption by having no water supply for longer than the time set in the notice, a rebate of \$65 will be applied to the customer's bill.
- East Gippsland Water has significant hardship procedures in place.
- If a residential customer is having difficulty paying a bill, and East Gippsland Water restricts water supply or takes legal action against the customer before taking reasonable action to provide information about these procedures, a rebate of \$300 will be applied to the customer's bill.

If East Gippsland Water employees fail to update a customer's billing details after the customer has requested such a change, a rebate of \$30 will be applied to the customer's bill.

If East Gippsland Water causes a sewage spill within a customer's house, we will pay the customer \$1000.

We will also clean up the property and provide alternative accommodation as required.

For more information –
www.egwater.vic.gov.au
Ph: 1800 871 841
Email: egw@egwater.vic.gov.au

5.5.3. Online survey and email feedback

Along with the facts sheets and community consultation sessions customers were invited to comment utilising an online web survey form.

A dedicated email address (waterplan3@egwater.vic.gov.au) was set up for customers to provide another alternative feedback option without having to use the survey form.

5.5.4. Advertisements in local papers

Various advertisements ran across each of the East Gippsland regional newspapers as advertorials. These were specific messages from the Chairman outlining the key proposals for WP3 and inviting customer feedback. The dates and titles of these releases are shown below:

23 July 2012	Final call for comments on WP3
12 June 2012	Seeking customer input on East Gippsland Water services
21 May 2012	No increase in water bills for five years proposed
28 December 2011	Help shape water and wastewater services

5.5.5. Written invitation to comment

EGW sent over 500 written invitations targeted to all known interested customers, representatives of relevant community groups in the region (such as welfare groups, environmental groups and economic development groups), and customers who had expressed an interest in being involved in EGW community consultation in previous annual customer satisfaction surveys.

EGW also included a note on all customer bills which were released during the public comment period about WP3 consultation sessions. Accompanying these notes was a message from the Chairman outlining key themes of the draft plan as well as dates and locations of consultation sessions.

Running in parallel to this process was a review of wastewater charges for non-residential customers. As part of communications to non-residential customers impacted by the changes, EGW included WP3 information and the opportunity to comment.

5.5.6. Staff input on WP3

EGW staff were given an opportunity to provide input during the development of the draft and the final plan through numerous meetings and workshops.

5.5.7. Customer Advocacy Group consultation

EGW approached both the Consumer Utilities Advocacy Centre (CUAC) and Victorian Council of Social Services (VCOSS) and presented to both how the draft plan was developed as well as the key themes in the draft. This allowed CUAC and VCOSS to directly question any elements of the draft particularly areas relating to tenants and large families.

5.5.8. Being aware of customer requirements

Along with all of the targeted WP3 activities EGW also used existing routine customer engagement activities for feedback.

These channels include:

- ① annual customer satisfaction survey;
- ① monthly customer follow up phone calls;
- ① meetings with major business customers;
- ① meetings with local community and special interest groups, such as Lions, Rotary, Chambers of Commerce, Landcare groups etc.;
- ① participation at local annual events such as environment- and water-related shows;
- ① management visits to each regional centre by rotation on a monthly basis, as well as by customer request.

Probably the most important form of feedback for EGW is the daily interaction with customers from simply living and working locally. Due to input from all levels of staff and Board, it is believed that an in-depth view of customers' values and needs has been incorporated.

5.5.9. Key dates advertised on the EGW website

Finally, EGW provided clear guidance to customers as to when feedback was due so it could be included in WP3.

31 July 2012	Deadline for public submissions on draft Water Plan
30 September 2012	Deadline for final draft plan to be submitted to the ESC, taking into account further feedback we received from EGW customers
May 2013	ESC delivers its decision on the plan
July 2013	WP3 comes into operation and runs until 30 June 2018

6. Operational Expenditure

6.1. Introduction

Operating expenditure is the key component of establishing the revenue EGW require from customers to provide the desired level of service. The operating expenditure EGW require for WP3 is built around a baseline or Business as Usual (BAU) level of costs, from historical and current expenditure.

In addition, EGW has new obligations to be completed for WP3. These obligations have associated expenditure that is added to BAU. These additional obligations imposed by Government and regulators, or increased service standards requested by customers, will increase operating expenditure over BAU levels of costs.

Depreciation and financing costs are also part of the total operational expenditure but sit outside the pricing model for WP3.

6.2. Total Operating Expenditure for WP3

EGW is forecasting total operating expenses of \$146.1 million across WP3. This includes \$87.86 million to maintain and improve service delivery to customers and meet EGW's obligations as well as \$58.24 million for depreciation and financing costs.

Table 9 outlines the total operating expenditure forecast for WP3, including depreciation and financing costs. Depreciation costs will increase by \$8.78 million over WP3 due to the asset revaluation undertaken in 2010-11. Financing costs are also set to increase by \$1.18 million.

Table 9: Total Operating Expenditure Forecast for each Year of WP3

Expenditure (\$ million)	2013/14	2014/15	2015/16	2016/17	2017/18
Operations, Maintenance and Administration Expenses (includes licence fees)	15.80	16.02	16.74	16.71	17.04
Environmental Contributions	1.17	1.14	1.11	1.08	1.06
Borrowing Costs / Interest Expense	2.29	2.21	2.32	2.39	2.18
Depreciation and Amortisation	9.30	9.37	9.38	9.40	9.45
Total Operating Expenses	28.56	28.74	29.55	29.57	29.72

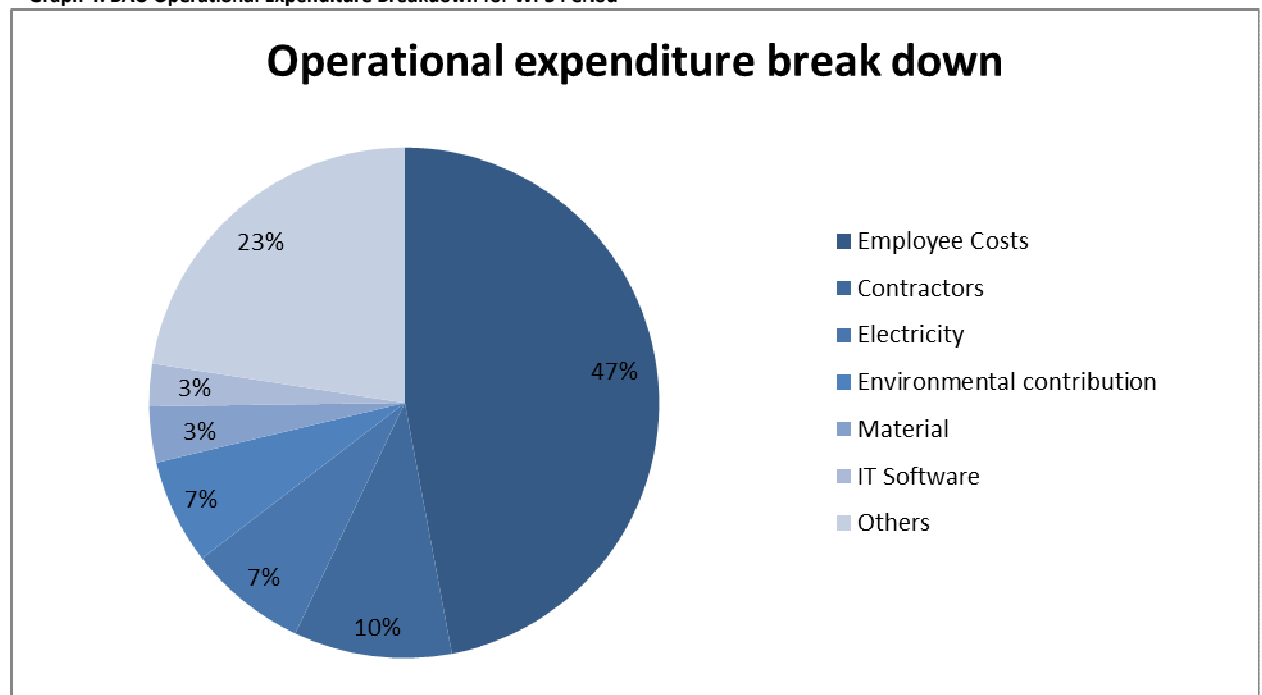
6.2.1. BAU operating expenditure for WP3

Table 10 and Graph 4 display a breakdown of the major BAU operational expenditure areas for WP3.

Table 10: BAU Operational Expenditure for each Year of WP3

Expenditure (\$ million)	2013/14	2014/15	2015/16	2016/17	2017/18
Operations & Maintenance	5.69	5.75	6.01	5.92	5.91
Treatment	2.30	2.34	2.38	2.44	2.49
Customer Service & Billing	0.84	0.86	0.88	0.90	0.92
Corporate	6.84	6.99	7.40	7.37	7.64
Total Water & Wastewater	15.67	15.94	16.66	16.63	16.95
Licence Fees					
Essential Services Commission	0.08	0.03	0.03	0.03	0.03
Department of Human Services	0.01	0.01	0.01	0.01	0.01
Environmental Protection Auth.	0.04	0.04	0.04	0.04	0.04
Total Licence Fees	0.13	0.08	0.08	0.08	0.08
Total Water and Wastewater with licence fees	15.80	16.02	16.74	16.71	17.04
Environmental Contribution	1.17	1.14	1.11	1.08	1.06
Grand Total	16.97	17.16	17.85	17.79	18.09

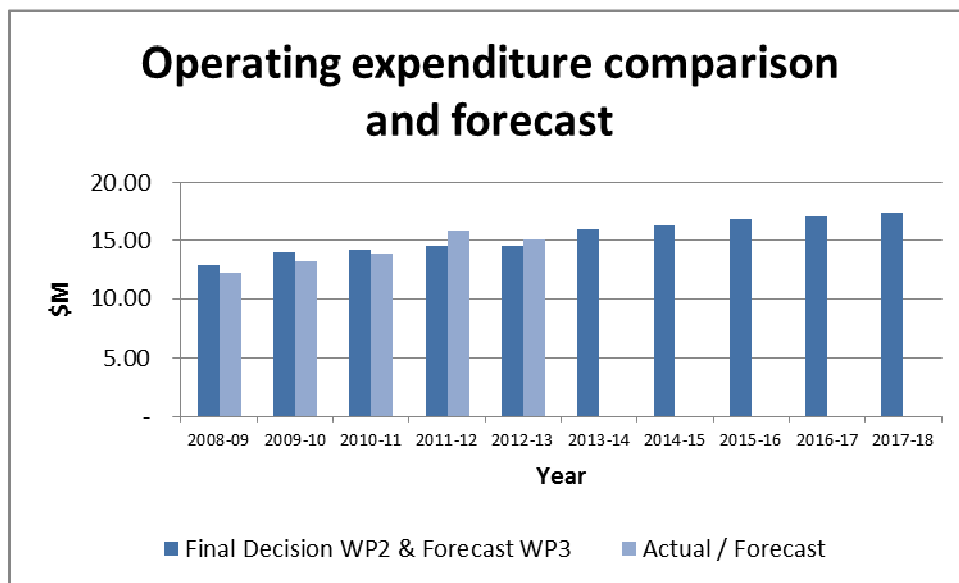
Graph 4: BAU Operational Expenditure Breakdown for WP3 Period



6.3. Justification for Increased Expenditure Levels

BAU operational expenditure for WP2 is expected to be \$73.8 million at the end of June 2013. For WP3, the forecast for operational expenditure is expected to be \$87.86 million which is an increase of \$14.05 million in total.

Graph 5 shows the forecast operational expenditure for WP3. Operational expenditure from WP2 is also shown to provide a comparison for the levels forecast in WP3.



Graph 5: Total Operational Expenditure for WP2 & WP3 Periods

Graph 5 shows that operating expenditure across WP2 increased with the construction of a large number of infrastructure assets, as well as staffing costs, to cater for increased regulatory and compliance requirements. This provides the baseline expenditure for the WP3 forecast.

Based on the current levels of service provided to customers, EGW is confident that the forecast BAU expenditure for WP2 is consistent with that needed to meet service standards in WP3. The increase in BAU of \$14.05 million can be attributed to the specific areas outlined in Section 6.4 below. Additionally, the budgeting processes followed for this plan have been robust with costs analysed and verified to provide high levels of assurance that all proposed expenditure is driven by efficient operations and value for money.

The major increases in operational costs in WP3 (compared with WP2) are made up of:

- Ⓢ **operational cost of running the Woodglen water treatment plant.** This plant was completed in 2011 and ensures residents from Lindenow through to Nowa Nowa have secure, reliable and high quality drinking water. An extra \$1 million has been included for WP3 to reflect a full five-years running costs;
- Ⓢ **electricity costs.** Many of the services EGW provide require electricity. With electricity costs continuing to rise this cost will increase by \$1.288 million over WP3. Further detail is provided in the specific cost analysis in Section 6.4;

- ④ **desludging cost.** The level of sludge in wastewater treatment lagoons has accumulated over time. Desludging is required periodically to ensure that wastewater continues to be treated effectively. This will cost EGW \$838,000 over WP3;
- ④ **environmental contribution.** This is collected by all water corporations on behalf of government to be used for the sustainable management of water, or to address water-related adverse environmental impacts. This will increase by \$1.45 million;
- ④ **IT/SCADA.** IT license fees and SCADA costs will increase across WP3. This will improve the ability to remotely monitor water and wastewater infrastructure, resulting in reduced risk and service improvement. Increases in operating costs of \$800,000 have been included in WP3;
- ④ **employee costs.** Staff numbers are proposed to increase by 2 over WP3. This is a minimal increase considering that EGW will provide the same level of service across its customer base including all growth. The total extra staff costs for WP3 will amount to \$6.3 million and include the increased superannuation guarantee costs. Further detail is provided in Section 6.4 below.

6.4. Justification of Specific Cost Areas

6.4.1. Information Technology

Over WP2, EGW invested in a number of computerised systems to improve services to customers and ensure compliance with financial and record keeping requirements. New systems included finance, knowledge management, and customer service and billing, with further investment in SCADA systems (remote infrastructure monitoring). For WP3, a 5% increase in Information Technology (IT) expenditure is forecast in each year, with software system licence fees set to increase by approximately \$600,000 across the five years.

For EGW, the major IT cost increase is associated with the SCADA system. This investment will:

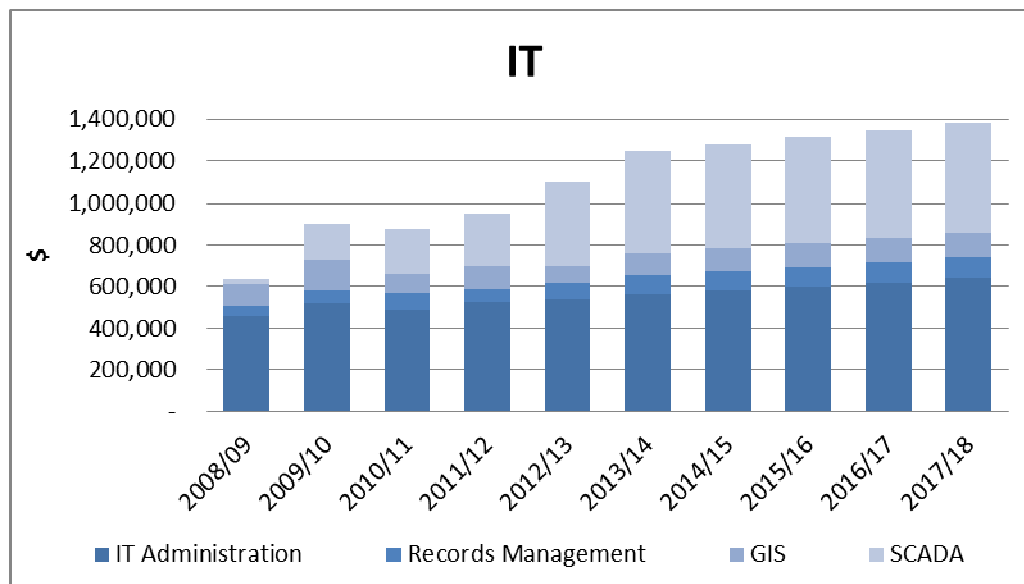
- ④ improve the ability to monitor and maintain risk controls;
- ④ improve the ability to respond to service interruptions to customers and maintain service standards;
- ④ decrease sewerage spills to the environment;
- ④ improve the reliability of drinking water treatment plant operations.

Compliance with regard to SCADA security has also been raised via a number of Government reports and investment has been programmed to mitigate this risk.

Other IT related factors which will impact costs for WP3 are:

- Ⓒ enhancement of business continuity backup systems and control;
- Ⓒ software licensing including 30% increase for Microsoft software;
- Ⓒ Geographic Information Systems (GIS) connectivity improvements;
- Ⓒ increased use of mobile devices for data collection and reporting efficiency;
- Ⓒ improved communications and connectivity between remote sites and head office.

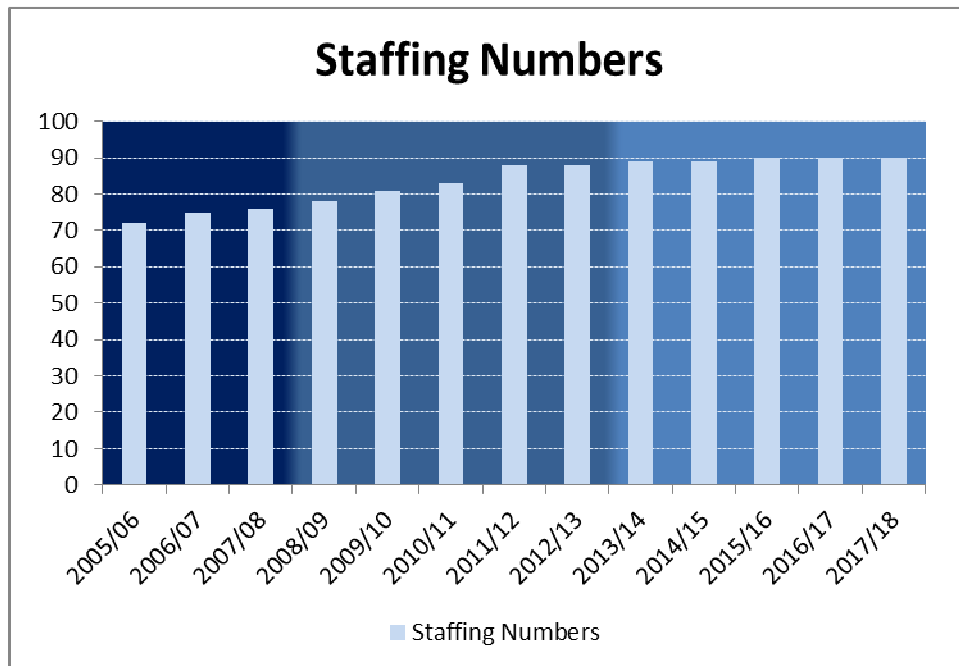
Graph 6 indicates the increase in costs associated with IT from WP2 to WP3, excluding depreciation.



Graph 6: IT Expenditure for WP2 and WP3

6.4.2. Employee costs

Employee costs are the major expenditure item for EGW over WP3, accounting for 47% of operating expenditure. As shown in Graph 7, EGW is proposing a net increase of only two additional staff during WP3; one field-based and one office-based trainee. However, there was a significant increase in staffing numbers across WP2 (12 in total) as a direct response to regulatory requirements placed on EGW, and the level of expertise required to fulfil those requirements. This is also reflected in the fact that at the beginning of WP2 EGW had 16 tertiary qualified employees, compared to the start of WP3, where it is anticipated that there will be 31.



Graph 7: Staff Numbers for WP2 and WP3

The proposed level of staffing for WP3, will allow EGW to absorb expected customer growth and the operation and maintenance of new and existing assets across WP2 and WP3. EGW's 2011 Enterprise Agreement provides for a 4% increase in wages each year based on satisfactory achievement of Key Performance Indicators (KPIs) until December 2013. In real terms, EGW has used a wage growth of 1.5% for all staff, including the executive team, across WP3. There is no provision in the WP3 operating expenditure for performance bonuses or wage increases to executive team members above the 1.5% real growth.

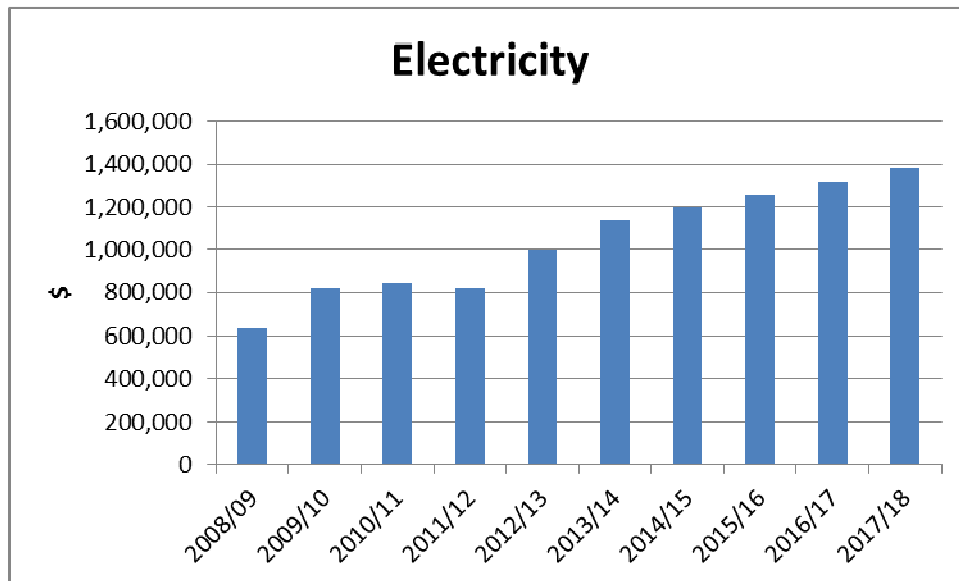
6.4.3. Electricity

The cost of electricity has increased at a rate greater than CPI across WP2 and this is expected to continue for WP3. EGW source all electricity through a strategic purchasing arrangement with Procurement Australia.

EGW has undertaken a number of electricity efficiency programs to minimise the amount of electricity used in operations. This includes installing variable speed drives to control pumps and engaging with suppliers to take advantage of off-peak tariffs and demand patterns.

EGW has included a real increase of 5% per year for electricity tariffs plus the impact of carbon tax. EGW have used historic data from 2009 to 2012 to help determine the amount of electricity required for operations. Additional sewerage schemes at Bemm River, Tambo Bluff and Lake Tyers Aboriginal Trust will also increase the amount of electricity needed.

Graph 8 demonstrates the increase in electricity costs across the WP2 period and projected forward through WP3.



Graph 8: Electricity Costs for WP2 and WP3

Carbon Tax

The federal Government legislation for Carbon Tax became effective from 1 July 2012. The rates published per tonne of carbon until 2014 are listed below:

1 July 2012	\$23.00/tonne
1 July 2013 (start of WP3)	\$24.15/tonne
1 July 2014	\$25.40/tonne

From 1 July 2015 flexible pricing will be in place which will be directly linked to the European Market servicing over 500 million people. The estimate of this cost for 2016-2018 is:

1 July 2016	\$27.00/tonne
1 July 2017	\$29.00/tonne
1 July 2018	\$30.00/tonne

Applying these figures to EGW's total emissions, results in the following carbon costs for electricity in WP3:

Carbon Tax - Electricity	
Year	Impact \$
2013/14	163,000
2014/15	171,000
2015/16	180,000
2016/17	190,000
2017/18	200,000
Total	904,000

Other cost impacts from Carbon Tax

EGW has assumed a 2.5% real increase on relevant operational cost categories. This includes the impact of flow-on cost increases associated with the introduction of the Carbon Tax as well as other identified pricing pressures.

EGW are not proposing any carbon mitigation programs for WP3.

6.4.4. Competitive procurement

To ensure that procurement is prudent and efficient, EGW has used Procurement Australia since 1997, to competitively source consumables such as:

- Ⓔ electricity;
- Ⓔ gas;
- Ⓔ pipes;
- Ⓔ plumbing fittings;
- Ⓔ tools;
- Ⓔ chemicals;
- Ⓔ uniforms;
- Ⓔ stationery.

Procurement Australia is an organisation that competitively procures goods and services for a range of public entities such as councils and water corporations. Savings are generated through bulk purchasing, negotiated contracts and benchmarking.

EGW also uses a competitive procurement process for the purchase of all fleet vehicles.

6.4.5. Government tax forecast

EGW's total costs for Workcover over WP3 will be \$334,000 with payroll tax set to be \$1.618 million.

6.4.6. Defined benefits

EGW has been able to absorb the additional defined benefit contributions required by Vision Super over WP2. EGW anticipate that any further contribution to Vision Super would need to be assessed on a case by case basis as to whether this can be absorbed within operating expenditure. No defined benefit payment has been included in forecast expenditure for WP3.

6.5. Productivity Improvements in WP3

The WIRO requires the ESC to be satisfied that prices proposed by EGW in WP3 provide for a sustainable revenue stream and does not reflect monopoly rents or inefficient expenditure. The ESC must also be satisfied that the proposed prices will provide continuing incentives to pursue efficiency improvements. In this respect, a 1% efficiency improvement on customer growth adjusted business as usual expenditure over WP3 is proposed (excluding licence fees and the environmental contribution).

Licence fees and the environmental contribution have been excluded on the basis that they represent uncontrollable costs mandated by regulators and government. Table 11 contains the productivity savings required over WP3 which total \$709,530.

Table 11: Required Productivity Savings Calculation

Productivity Analysis (\$)	2013/14	2014/15	2015/16	2016/17	2017/18
BAU operating expenditure - as per WP3	14,700,000	15,063,000	15,651,000	15,897,000	16,312,000
Growth adjusted BAU operating expenditure	14,077,000	14,134,000	14,191,000	14,247,000	14,304,000
Productivity factor amount	140,770	141,340	141,910	142,470	143,040

6.5.1. Operational efficiencies

EGW proposes to generate efficiency improvements on customer growth adjusted BAU through productivity savings in the following areas:

🔍 new sewer/water supply systems at Bemm River, Tambo Bluff and Lake Tyers.

The new systems have increased the number of pump stations and infrastructure assets that have to be maintained to achieve service levels. The increased cost of maintenance and operating of these infrastructure projects will be absorbed into current staffing levels. This results in direct efficiency gains of 1.5 full-time equivalent employees amounting to approximately \$470,000 over WP3;

- ④ **implementation of productivity savings from the Enterprise Agreement (EA).** One of the targets included in EGW's Enterprise Agreement is for achieving a 1% reduction in energy use per year, this will amount to a \$63,000 saving over WP3;
- ④ **electronic processing improvements in the customer business team.** Improvements in EGW's billing system will allow processing of information statements and daily banking to become fully automated, this will result in a saving of \$37,000 over WP3;
- ④ **handling of new customers.** EGW has forecast customer growth of 1500 over the Plan and will absorb the additional customers into current staff levels resulting in a productivity saving of \$137,000 over WP3.

In total, productivity savings will amount to a projected \$707,000 over the full five years of WP3 which covers the required 1% growth-adjusted productivity requirement.

7. Capital Expenditure

7.1. Introduction

To assist with the development of WP3 a detailed assessment of further capital investment over the next ten years has been undertaken.

7.2. WP3 Capital Program

The identification of capital projects has been based on the strategic risk register, strategic infrastructure plans, and forecasts of renewals from EGW's Asset Management System to identify investment priorities. Following rigorous assessment of options, only capital works that are identified as being required to ensure service standards continue to be met, or further mitigate risks to EGW's strategic objectives, have been included. The forecast capital expenditure for WP3 is outlined in Table 12 and the full list of projects proposed in the ten-year program is listed in **Appendix 2**.

Table 12: Forecast 10 Year Capital Expenditure WP3

Details	WP3 Period (\$ million)					5- Year Total
	2013/14	2014/15	2015/16	2016/17	2017/18	
Upgrade/Augmentation:						
Water	2.71	4.53	2.08	2.01	1.67	13.00
Sewer	1.83	4.42	4.32	2.44	5.10	18.11
Corporate	0.87	0.61	0.44	0.61	0.44	2.96
Renewals:						
Water	0.42	0.40	0.58	0.53	1.16	3.10
Sewer	0.53	0.53	0.44	0.89	0.66	3.04
Corporate	0.97	0.70	0.83	0.79	0.78	4.07
Sub-Total (Planned)	7.74	11.52	9.05	7.70	10.01	46.02
Funded Works	1.55	1.58	1.57	1.54	1.54	7.79
Total	9.30	13.09	10.62	9.24	11.55	53.81

The proposed capital investment program for WP3 of \$53.8 million is \$21.6 million less than in WP2. This reflects that a significant proportion of work undertaken in WP2 was to cater for future growth and ensure water quality while WP3 is a period of consolidation.

Eight projects are also scheduled to be initiated in WP3 and completed in subsequent regulatory periods. Table 13 provides details on expected delivery dates and proposed expenditure.

Table 13: Water Plan 3 Capital Works

Details *	WP3 Period (\$ thousands)					5-Year Total
	2013/14	2014/15	2015/16	2016/17	2017/18	
Sewerage						
Bairnsdale Sewer Master Plan - new rising main Howitt Ave	90	603	-	-	-	693
Bairnsdale Sewer Master Plan - Wy Yung SPS - Duplication of gravity sewer	29	180	-	-	14	223
Bairnsdale Sewer Master Plan - Bosworth Rd SPS - Provision of offline storages	19	106	23	-	-	148
Bairnsdale Sewer Master Plan - Flinns Rd SPS - Increase pumps capacity & new rising main	158	1,062	-	-	-	1,220
Bairnsdale Sewer Master Plan - Bridge SPS - New rising main	-	246	2,014	-	-	2,260
Bairnsdale - Bent St SPS Replacement	210	401	-	-	-	611
Eastwood - Charlton PI SPS review and remove	178	-	-	-	-	178
Bairnsdale - WWTP Upgrade	-	-	-	1,016	4,194	5,210
Bairnsdale - Bridge SPS - Civil/Mechanical improvements	59	-	-	-	-	59
Cann River WWTP - filter cover	-	14	-	-	-	14
Bairnsdale, Paynesville, Lakes Entrance, Orbost and Dinner Plain infiltration	47	297	51	297	51	743
All SPS - Bypass Pumping Arrangements	-	47	58	58	47	210
SPS Renewals	52	63	73	84	84	356
Irrigation and Reuse Renewals	157	136	115	142	115	665
WWTP Plant Renewals	103	85	157	136	302	783
Sewerage Renewals (below ground)	44	245	91	178	155	713
Irrigation and Reuse Upgrades	284	201	295	437	46	1,263
Gippsland Lakes Foreshore - Asset Protection	-	-	-	157	-	157
WWTP Aerator renewals	173	-	-	346	-	519
STP Lagoon desludge - biosolids management	589	589	589	589	589	2,945
Wastewater Reuse Schemes	42	10	735	-	-	787
All WWTP - Inlet/Outlet metering	-	-	79	63	-	142
Dinner Plain Reuse Arrangements	-	-	135	-	-	135
Lakes Entrance SMP - Marine Pde SPS - Upgrade pumps & new rising main	-	842	-	-	-	842
Lakes Entrance SMP - Ferndale Pde SPS - Construction of a new emergency storage tank	-	-	301	-	-	301
Lakes Entrance SMP - Tea Tree Lane SPS - Construction of a new emergency storage	-	-	-	163	-	163
Lakes Entrance WWTP - Odour Management	-	-	52	-	-	52
Banksia Peninsula LPSP replacement	20	20	20	-	-	60
Lake Tyers Beach Road SPS Odour Control	-	-	21	-	-	21
Lindenow - WWTP Winter Storage	-	-	-	-	21	21
Full Development of Metung Farm	-	-	-	98	-	98
Omeo SMP outcomes	-	-	246	-	-	246
Paynesville SMP - P Station upgrade WP3	388	-	-	-	-	388
Paynesville - Barkhill Rd Farm Power and Watermain	-	-	-	-	182	182
Sub-Totals:	2,642	5,147	5,055	3,764	5,800	22,408

Table 13: Water Plan 3 Capital Works

Details *	WP3 Period (\$ thousands)					5-Year Total
	2013/14	2014/15	2015/16	2016/17	2017/18	
Water						
Bairnsdale Elevated Water Tank	38	26	-	-	-	64
Wy Yung - Wy Yung Rural WPS	63	315	-	-	-	378
Mitchell Water Master Plan - Wy Yung Basin Tank or Liner	-	-	-	212	900	1,112
Cann River - Offtake Raw WPS Upgrade	-	-	33	-	-	33
Cann River Spear Pumps	54	-	-	-	-	54
SCADA - Wastewater Management Systems	105	136	126	126	126	619
SCADA - Raw Water Management Systems	-	52	-	89	-	141
SCADA - Renewals & upgrades	52	84	84	231	188	639
SCADA - Clear Water Management Systems	105	105	210	157	105	682
SCADA - Ancillary Management Systems	177	104	84	-	105	470
Miscellaneous Renewals	21	21	21	52	37	152
Dam upgrades	52	525	-	525	52	1,154
WPS Renewals	17	25	27	63	88	220
Water Treatment Renewals	5	16	173	56	271	521
Water Storage Renewals	84	34	38	63	444	663
Water Renewals (below ground)	318	329	339	348	358	1,692
Mitchell Water Master Plan - North Arm MSPL Duplication	715	-	-	-	-	715
Lakes Entrance - Sunlakes Bypass Tank	21	-	-	-	-	21
Metung water quality issues, replace AC pipe	10	-	-	356	152	518
Modify existing Omeo CWS	-	-	154	-	-	154
Orbost WTP electrical upgrades	178	-	-	-	-	178
Marlo MSPL Condition assessment and reconditioning	-	-	-	262	-	262
Mitchell Water Master Plan - Stage 2 MSPL Upgrade - Eagle Point to Paynesville	-	122	1,371	-	-	1,493
Mitchell Water Master Plan - 2nd Sarsfield Tank or lining basin	189	2,303	-	-	-	2,492
Mitchell Water Master Plan - Replacement Cast Iron Pipe	-	735	-	-	-	735
Stock Exclusion Fencing at Swifts Creek Offtake	41	-	-	-	-	41
Mitchell Water Master Plan - Bulk Storage	546	-	-	-	-	546
Woodglen WTP Washwater System Augmentation	343	-	-	-	-	343
Sub-Totals:	3,134	4,932	2,660	2,540	2,826	16,092

Table 13: Water Plan 3 Capital Works

Details *	WP3 Period (\$ thousands)					5-Year Total
	2013/14	2014/15	2015/16	2016/17	2017/18	
Corporate						
Head Office Refurbishment - air conditioning, ancillary renewals & archives	31	126	-	-	-	157
Corporate Vehicles	764	514	674	664	689	3,305
Head Office - Furniture Renewals	48	59	36	39	61	243
Office/Depots Equipment Renewals	162	123	119	82	31	517
Plant & Equipment	127	135	70	-	167	499
IT Hardware & Software improvement (capital expenditure)	787	471	425	612	437	2,732
Upgrade Depot sites buildings / storage	47	10	10	-	-	67
Sub-Totals:	1,966	1,438	1,334	1,397	1,385	7,520
Total	7,742	11,517	9,049	7,701	10,011	46,020
Owner Funded Works						
Owner funded works - water	661	661	661	661	661	3,305
Owner funded works - sewer	881	881	881	881	881	4,405
Lake Bunga Toilet Block SPS	-	-	32	-	-	32
Surf Club SPS	11	33	-	-	-	44
Sub-Totals:	1,553	1,575	1,574	1,542	1,542	7,786
Grand Total	9,295	13,092	10,623	9,243	11,553	53,806

*all capital project costs in 01/01/13 dollars

7.3. Capital Project Selection Process

All capital expenditure proposals have been developed in a rigorous, robust and transparent risk-based “optioneering” framework, to ensure investments help achieve identified and agreed service standards.

The Issue Optioneering Report (IOR) framework was used to assess EGW needs, identify potential capital solutions, prioritise and select the most suitable cost-effective capital investment solutions. The development of the WP3 capital works program and framework commenced in August 2010.

Strategic issues that were to be addressed by capital expenditure were identified based on the risk profile of EGW, which in turn reflects the Board’s risk appetite. EGW’s well-established strategic risk register was used to prompt workshop discussions involving key staff and expert consulting engineers.

A minimum of three options were considered for each identified issue and a weighting was applied to the selected multi-criteria assessment. A weighting on cost factors ensured that only projects that are effectively responding to issues in a financially responsible manner proceeded through the framework “gateways”. A Net Present Value (NPV) analysis has also been included as part of the assessment process to ensure the solution identified thoroughly considered the total cost over the life of the asset.

IORs have been prepared for every capital investment proposed for WP3 as well as the significant operational projects.

Strategic infrastructure plans

A number of the proposed capital investments are supported by strategic investigations undertaken in the lead up to the development of WP3. These include:

- ② sewer master plans;
- ② water supply demand strategies;
- ② water master plans.

Sewer master plans are investigations that review the current infrastructure and identify future augmentations that may be required for predicted population growth or adjustments to standards. The sewer master plans look at current sewerage system issues and assess if any adjustments/investments are needed to effectively and efficiently cater for growth and compliance requirements. This approach ensures that only the assets necessary to provide the service standards to EGW’s customers are maintained or established, at an acceptable level of risk. These strategies typically have a 20-year planning horizon and are reviewed as required. Sewer master plans have been generated for the sewerage systems at Bairnsdale, Lakes Entrance and Paynesville, with work currently being completed on the Omeo plan.

Water supply demand strategies are developed to review the current and predicted changes to water supply and demand. It can then be determined what solutions may be required to meet water security service levels. These strategies have a 50-year horizon and are reviewed every five years, or as major system adjustments are made. Water supply demand strategies were developed during the WP2 period for all nine water supply systems operated by EGW, and were a key informant for preparation of the capital works requirements for both WP3 and WP4.

A water master plan has been generated to determine infrastructure requirements within the Mitchell River water supply system over the next 10 years. The Mitchell system is EGW's major water supply system, supplying more than 82% of EGW's customers. The key difference between the water supply demand system and the water master plan is the scale at which the service is being provided. The water supply demand strategies look at the broader water supply issues, with the water master plan looking closer at the system to determine where there may be deficits relating to treatment, clear water storage, transfer or reticulation.

These key strategic plans have informed EGW's ten-year capital works program development and the recommended investments. This approach ensures the most efficient and effective deployment of resources on a system-wide basis.

Asset management

EGW use an Asset Management System to inform identification of asset renewals. The Asset Management System incorporates EGW's policies, procedures and processes, including computer-based software and EGW's asset database, to develop renewals profiles for all assets.

For water main renewals, the methodology adopted is based on statistical averages applied to the expected asset standard life, expected rates of failure and the failure to replacement ratio (determined through analysis of EGW historical data and industry experience). This was analysed with the overall aim of ensuring compliance with the service standards; for instance, making sure that there were no more than three unplanned water supply interruptions expected in any 12-month period. It is understood that while many assets have exceeded their estimated useful life and continue to provide the required level of service some assets will fail ahead of time.

For sewer main renewals, the methodology applied includes a program of CCTV inspections to assess condition, targeting those with a high probability and high consequence of failure. Based on historical data, inspection-to-renewal ratios have been established according to the age and material of the assets.

Renewal of above ground assets is based on a visual assessment of condition as these assets can be inspected more readily. EGW undertook an extensive asset inspection program to assess the condition of all above ground assets in 2010.

For all of the infrastructure asset renewals, high and low risk options/scenarios were considered to determine the most appropriate level of expenditure. Estimates of replacement costs are based on previous similar EGW works, where possible. The provision of timely asset renewals has been incorporated into the ten-year capital works program.

Cost assumptions

All other project costs have been generated by EGW's consulting engineers, AECOM. Where previous cost information was not readily available, estimates were prepared by experienced professional consulting engineers and internal staff. All costs in the ten-year capital works program use the most likely cost estimate, being the P50 cost estimate.

The IOR framework incorporated a range of tools to guide the selection of the best solution under consideration and included financial analysis, multi-criteria assessment and NPV (cost) assessments as appropriate. Optioneering reports also incorporate EGW's operational costs to ensure that the full costs of options were considered.

Delivery mechanism

EGW currently delivers the capital works program via an alliance-type contract with AECOM. This "alliance" includes a virtual organisation overseen by the Joint Leadership Team with program delivery managed via the Program Delivery Management Team. The alliance arrangements undergo regular reviews to ensure EGW is obtaining value for money from this relationship.

This relationship ensures that EGW does not have the employment risk associated with a large capital delivery team, whilst at the same time having access to local, national and international expertise. The relationship has been in place for many years and has proven to be an effective and efficient means of achieving the delivery of the capital program. The relationship is not exclusive and EGW also have other relationships with third party companies for selected projects.

The relationship incorporates a range of Key Results Areas and KPIs and includes "pain-share" provisions (but no "gain-share" payments). Anticipated project design and supervision costs are included in project cost estimates.

EGW has also developed a range of internal expertise to identify and manage program and project-related business risks, as well as to ensure EGW is an informed purchaser of consulting engineering services. EGW also has a robust project management process as part of the asset management system.

Top ten project sample

All projects that have been considered for inclusion as part of the WP3 program have been subject to a consistent and comprehensive assessment of costs. As stated above, rates for similar, recent, projects have been used where available, or specific quotes have been obtained, or cost estimates have been developed using first principles.

The IOR framework incorporates multiple “gateways” or review stages, where developed cost estimates are peer reviewed. For example, the cost estimate for the most significant proposed project, the Bairnsdale wastewater treatment plant, has been developed by AECOM specialists with experience in wastewater treatment plant design and construction. The options considered have been subject to extensive internal review and workshops to prepare of the concept design report. The drivers for the top ten projects, outcomes and timelines are outlined in Table 14.

Table 14: Top 10 Projects for WP3

Project Name	Driver	Comments	Outcomes	Delivery Date
Bairnsdale WWTP upgrade	Growth/Renewal	There are a number of drivers associated with the upgrade of the Bairnsdale WWTP, with other drivers being renewals and improved performance reliability.	Manage the risks associated with failure of ageing assets associated with key process components, improve treatment process reliability to ensure regulatory parameters continue to be met and increase capacity to meet population growth to ensure the continued effective and efficient wastewater treatment in EGW's largest town. Capital investment in the Bairnsdale WWTP will allow replacement of the sludge handling works which are currently offline, improved performance reliability increasing opportunities for beneficial reuse of treated water in the vicinity of the facility and improved management of stormwater.	2016 – 2018
Corporate vehicles	Renewal	Maintenance of the EGW's vehicle fleet is necessary to meet a range of standards and expectations.	The investment in change over vehicles is a renewal initiative and as such the outcomes are a like-for-like change over. Specialist fleet managers were engaged to review the current arrangements to determine the optimal response to the existing and emerging issues associated with the EGW's corporate vehicle fleet.	2013 – 2018

Project Name	Driver	Comments	Outcomes	Delivery Date
SCADA upgrade & support	Improved service	Although there will be a significant improvement to the services provided through the deployment of the SCADA strategy, there are a range of renewals that will also be catered for as part of this initiative.	There will be ongoing investment in SCADA to ensure EGW's ability to remotely control and monitor assets in the distant reaches of the region in real-time. This initiative is largely improved services, with some elements of renewals. This response is also supported by a robust risk management assessment through the IOR framework that ensures that the response to the identified issues is efficient and effective.	2013 – 2018
Wastewater lagoon desludge	Compliance	With the accumulation of biosolids, there is a requirement to comply with the environmental standards set by the EPA.	The desludging initiative will address the issues associated with the accumulation of biosolids, which has been occurring for several years. Outcomes will include the acquisition of plant and equipment as well as building in-house skills to enable the desludging of assets.	2013 – 2018
IT hardware/software	Renewals	Many of the elements included in this relate to renewals which will drive improved service.	This initiative relates to the renewal of existing hardware and software service provision. It is expected that with the renewal of IT assets, for both hardware and software, there will be an improvement in the level of service provided by these assets, as the broader industry dictates an improvement in quality of the products generated. This review was undertaken as part of an IOR and relies on the strategy developed to	2013 – 2018

Project Name	Driver	Comments	Outcomes	Delivery Date
			oversee deployment of IT systems throughout EGW.	
Water renewals (below ground)	Renewal	This initiative is purely for renewals based on outcomes from the AMS.	This is a general allocation for the replacement of underground water assets based on the asset management approach (refer above). The outcome will be to continue to have these assets meet their intended service. The renewals assessments investigated replacement options within a risk management framework, seeking to ensure that assets are replaced in a manner that ensures service levels are not compromised.	2013 – 2018
Bairnsdale Sewer Master Plan Bridge SPS	Compliance	Upgrades to this SPS will ensure that service standards are not compromised through inadequate infrastructure.	The key outcomes from this initiative will be the ability to handle the diversion of flow from Wy Yung through Flynns Road SPS and Bridge SPS, a major adjustment to the manner in which sewerage flows are managed in the Bairnsdale area. This initiative will also accommodate additional sewer rising main from the Bridge SPS directly to the Bairnsdale WWTP. This assessment was undertaken as part of the Bairnsdale Sewerage Master Plan ensuring the best solution to the identified risks.	2014 – 2016

Project Name	Driver	Comments	Outcomes	Delivery Date
Wy Yung basin tank or liner	Growth	This initiative is driven by growth, as the assets that are currently in place are considered to be of insufficient capacity to cater for future demand, based on the preliminary outcomes from the Mitchell Water Master Plan	Based on preliminary findings from the Mitchell Water master plan, additional storage will be required at the Wy Yung site to respond to populations downstream of this site. The outcome that will be generated through this initiative will be to respond to the increased risk of inadequate clear water storage within the network resulting in an increase of clear water storage from the existing 88ML up to a suitable size. An allocation has been made for partitioning a proportion of the second 88ML storage and lining and covering this segment.	2014 – 2016
Sarsfield- additional tank or liner	Growth	This initiative is purely about growth, as the assets that are currently in place are considered to be of insufficient capacity to cater for future demand, based on the preliminary outcomes from the Mitchell Water Master Plan	It is expected that additional storage will be required at the Sarsfield site to respond to population downstream of this site and maintain appropriate water quality levels. The outcome that will be generated through this initiative will be the increase of clear water storage from the existing 6ML up to a suitable size in order to respond to the risk of inadequate clear water storage at this location. An allocation has been made for partitioning a proportion of the existing 160ML storage and lining and covering this segment.	2013 – 2015

Project Name	Driver	Comments	Outcomes	Delivery Date
Paynesville main supply pipeline (Stage 2)	Growth	The dominant driver for this initiative is related to growth, however, there are also key risks given the age of the assets in question.	This initiative is associated with the replacement of the Main Supply Pipe Line between Eagle Point and Paynesville to respond to the risk of this water main not being able to supply enough water to the township of Paynesville. The work has been projected from preliminary outcomes from the Mitchell Water Master Plan. It is expected that the key outcome of this initiative will be the replacement of an old asset and sizing the asset to meet the anticipated flow rates required as part of the projected future growth scenarios.	2014 – 2016

7.4. Analysis of P5 and P95 for Identified Projects

All of EGW's capital expenditure is based on P50 estimates of project costs. Additionally, the ESC directed that EGW perform a Monte Carlo P5/P95 assessment on the six highest cost projects. The assessment involved the breakdown of each of these projects into the key individual tasks and determining the cost variability of each task. Using information relating to the statistical variability of each task, the Monte Carlo assessment was performed using computer-based financial modelling tools. These tools selected a suitable statistical model for each project. A summary of the outputs from the analysis is detailed in Table 15.

Table 15: P5, P50 and P95 Analysis from the Monte Carlo Assessment

Project	P5	P50	P95
Bairnsdale WWTP Upgrade (Stage 1)	\$ 4,653,021	\$ 5,128,408	\$ 5,889,557
Lagoon Desludging	\$ 2,700,657	\$ 2,900,541	\$ 3,130,319
Paynesville Main Supply Pipeline (Stage 2)	\$ 1,387,913	\$ 1,469,501	\$ 1,560,719
Sarsfield Clear Water Storage Augmentation	\$ 2,185,221	\$ 2,374,618	\$ 2,570,353
Bridge SPS Augmentation	\$ 2,061,804	\$ 2,224,599	\$ 2,394,900
Wy Yung Clear Water Storage Augmentation	\$ 1,963,557	\$ 2,149,579	\$ 2,346,716

8. Revenue Requirement

8.1. Introduction

This section provides an overview of the revenue required by EGW in order to meet its obligations to customers and stakeholders during the WP3 period. It brings together the assumptions EGW have made about demand for services, expenditure requirements and capital financing.

The ESC building block approach calculates a maximum allowable revenue for water EGW's to efficiently operate their businesses, which in turn translates into tariffs based on forecast demand. The maximum allowable revenue consists of three components:

- ④ operating expenditure;
- ④ return on capital;
- ④ return of capital (regulatory depreciation).

8.2. Operating Expenditure

Operating expenditure includes two expense categories; (1) operations, maintenance and administration expenses; and (2) the environmental contribution. Extensive detail on operating expenditure is included in Section 6.

8.3. Return On and Of Capital

Return on and of capital calculations are linked to the regulatory asset base. The regulatory asset base represents the value, as assessed by the ESC, of past capital investments. This is the value on which EGW can expect to earn a return (return on capital), and the value that is returned to the business over the economic life of the assets (as regulatory depreciation).

EGW's projected regulatory asset base is presented in Table 16.

Table 16 Regulatory Asset Base WP3

Regulatory Asset Base*

	2012-13 - current	2013-14	2014-15	2015-16	2016-17	2017-18
Opening asset base	121.39	119.03	120.04	124.36	125.77	125.44
plus gross capex	4.10	7.77	11.52	9.06	7.70	10.01
less Government contributions	-	-	-	-	-	-
less customer contributions	0.50	0.50	0.50	0.50	0.50	0.50
less proceeds from disposals	0.36	0.40	0.40	0.40	0.40	0.40
less regulatory depreciation	5.60	5.86	6.30	6.74	7.14	7.50
Closing asset base	119.03	120.04	124.36	125.77	125.44	127.05

* \$ million (01/01/2013)

8.4. Revenue Requirement for WP3

EGW's projected revenue requirement per year for WP3 is shown in Table 17. As the table shows this remains relatively constant over WP3, starting at \$31.61 million in year one of the plan to a total of \$34 million in year five. The increase is predominantly related to returns on and of new assets. It should be noted that EGW are not pursuing adjustments from the second regulatory period and does not yet pay tax as it has brought forward tax losses.

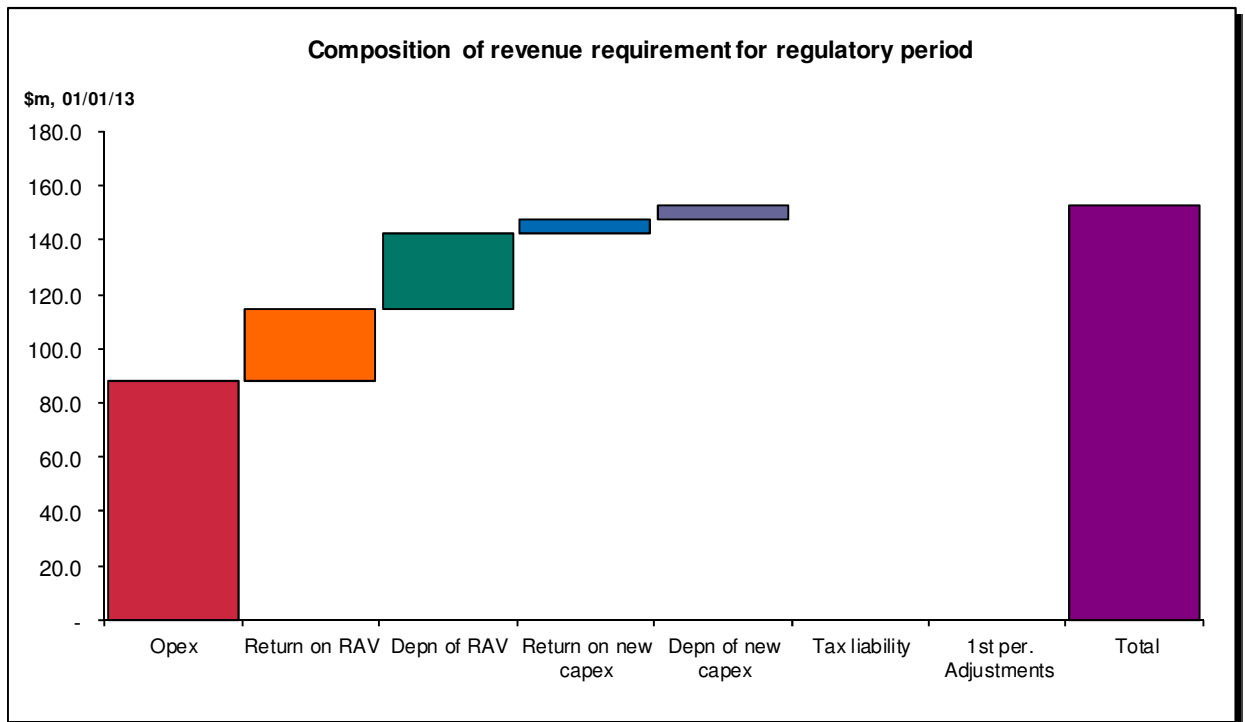
Table 17: Revenue Requirement WP3

Projected Revenue*

	2012-13 - current	2013-14	2014-15	2015-16	2016-17	2017-18
Water & sewerage service charges	20.62	20.58	20.58	20.52	20.34	19.98
Usage charges	7.02	7.83	8.60	9.35	10.17	10.84
Developer contributions	0.43	0.50	0.50	0.50	0.50	0.50
Developer contributions - gifted assets	0.84	1.55	1.58	1.57	1.54	1.54
Investment interest	0.06	0.08	0.08	0.08	0.08	0.08
Other revenue	1.14	1.06	1.06	1.06	1.06	1.06
Total revenue	30.11	31.61	32.39	33.09	33.69	34.00

* \$ million (01/01/2013)

Graph 9 shows the composition of EGW's revenue requirement over WP3. By far the major components are operating expenditure (63%) and return on and of the regulatory asset base (28%). The graph also highlights the composition and relative importance of the revenue requirement. Operating expenditure is generally constant at just over \$16 million per year, while the return of and on, assets to 30 June 2013 decreases over WP3 as regulatory depreciation is recovered.



Graph 9: Composition of Revenue Requirement WP3

8.4.1. Tax obligations

EGW’s benchmark tax liability for the WP3 period will continue to be zero in line with WP1 and WP2. This is due to EGW’s accumulated tax losses and accelerated depreciation allowed under the National Tax Equivalence Regime.

9. Demand

9.1. Introduction

The level of demand forecast across EGW's region is a key component of the WP3 process. It not only has bearing on the amount of operating and capital expenditure required over the plan, but is also used to calculate the final price for customers when divided into the revenue requirement.

Having experienced a significant drop in demand over the WP2, which resulted in a \$5 million reduction in revenue, EGW is acutely aware of the risks associated with getting demand wrong. As such, in-depth analysis and modelling of demand, with growth applied, has been used to derive the projected residential and non-residential water consumption rates for the WP3 period.

9.2. Key Inputs to Demand Analysis

EGW has adopted water supply demand strategies detailing how the balance between the demand for water, and available supply for urban systems should be maintained for the next 50 years. These strategies have ultimately determined that EGW supply systems are in a very positive position to meet current demand and cater for future growth.

In accordance with recommendations outlined in its water supply demand strategies, EGW has made significant investment across the WP2 period in order to secure supplies for customers. This investment has ensured security across all of EGW's supply systems and EGW could not reasonably foresee a situation whereby supply could not meet demand during WP3.

In addition to the water supply demand strategies, the following inputs have been used in the demand forecast for WP3:

- ⓐ population and demographic changes – will be according to Victoria in the Future 2008 & 2012 forecasts and EGW's own historic data;
- ⓐ general local conditions and forecast future market developments;
- ⓐ forecasts and historic information on water demand;
- ⓐ modelling of the impact of price on water demand;
- ⓐ effects of customer behavioural change through customer water use awareness campaigns and water efficiency devices such as showerheads;
- ⓐ consideration of bounce back in demand and price elasticity of demand.

9.2.1. Customer growth

Overall growth estimates for the EGW region are between 1.3%-1.5% per year. This estimate has been built referencing various sources including Victoria in the Future 2008 and 2012, Australian Bureau of Statistics results, water supply demand strategies and EGW's own growth data.

Table 18: EGW Customer growth estimates comparison to 2018

Year	Vic In Future 2008	Vic In Future 2012	East Gippsland Water Customer Data		
	Growth Estimates	Growth Estimates	Residential	Non Residential	% Total Growth Actual & Forecast
2007/08	1.50%		3.65%	2.18%	3.46%
2008/09	1.50%		1.82%	1.66%	1.80%
2009/10	1.50%		2.14%	1.03%	2.00%
2010/11	1.50%		1.32%	1.35%	1.33%
2011/12	1.40%	1.30%	3.55%	1.43%	3.28%
2012/13	1.40%	1.30%	1.60%	1.54%	1.59%
2013/14	1.40%	1.30%	1.50%	1.10%	1.45%
2014/15	1.40%	1.30%	1.45%	1.10%	1.41%
2015/16	1.40%	1.30%	1.45%	1.10%	1.41%
2016/17	1.30%	1.50%	1.36%	1.10%	1.33%
2017/18	1.30%	1.50%	1.36%	1.10%	1.33%
Sum of growth over Water Plan 3 period	6.80%	6.90%			6.92%

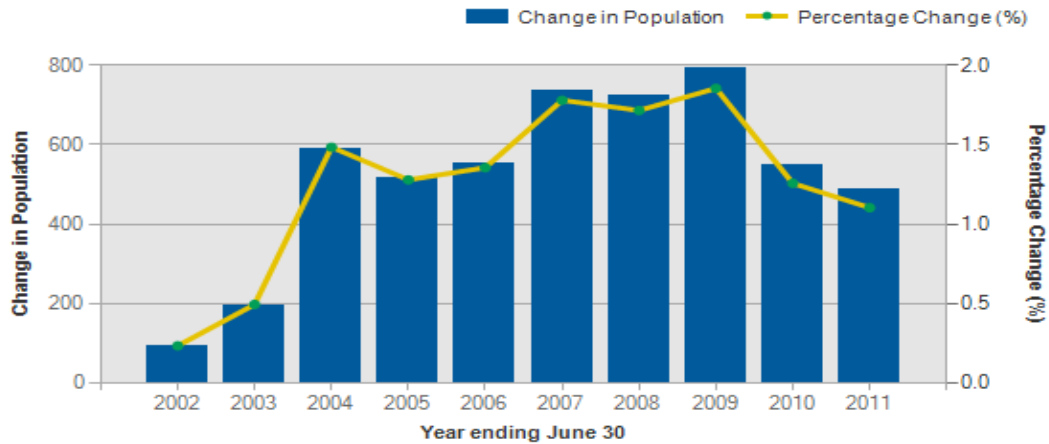
Table 18 shows the three sources of data used to develop the growth forecasts for WP3 with customers split into residential and non-residential, reflecting the two major customer groups EGW services.

Water and wastewater customer growth has been forecast at the same rate. This includes developer lots.

The spike in growth seen in 2011-12 was a result of water connections in Tambo Bluff, resulting in an extra 388 residential customers.

EGW's historical growth data is further supported by resident population growth data for the East Gippsland Shire region from 2002 to 2011 in figure 3 below.

Change in Estimated Resident Population, East Gippsland Shire



Source: Australian Bureau of Statistics, Cat. No. 3218.0 - Regional Population Growth, Australia, 2009

Figure 3: Change in Residential Population East Gippsland

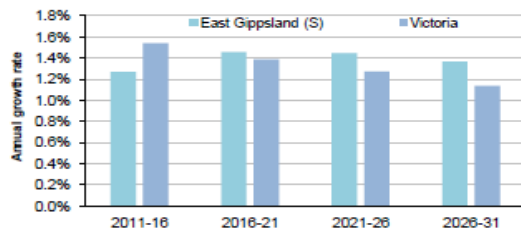
A more detailed picture of overall growth in households was also sourced from the Victoria in the Future 2012 report and is reflected in Figure 4.

East Gippsland (S)



Location: 400 km east of Melbourne
 Area (2011): 20,942 km²
 Pop. Density (2011): 2.1 persons per km²
 Major Centres: Bairnsdale; Lakes Entrance; Orbost

Average annual population growth rate 2011 to 2031



Population and households

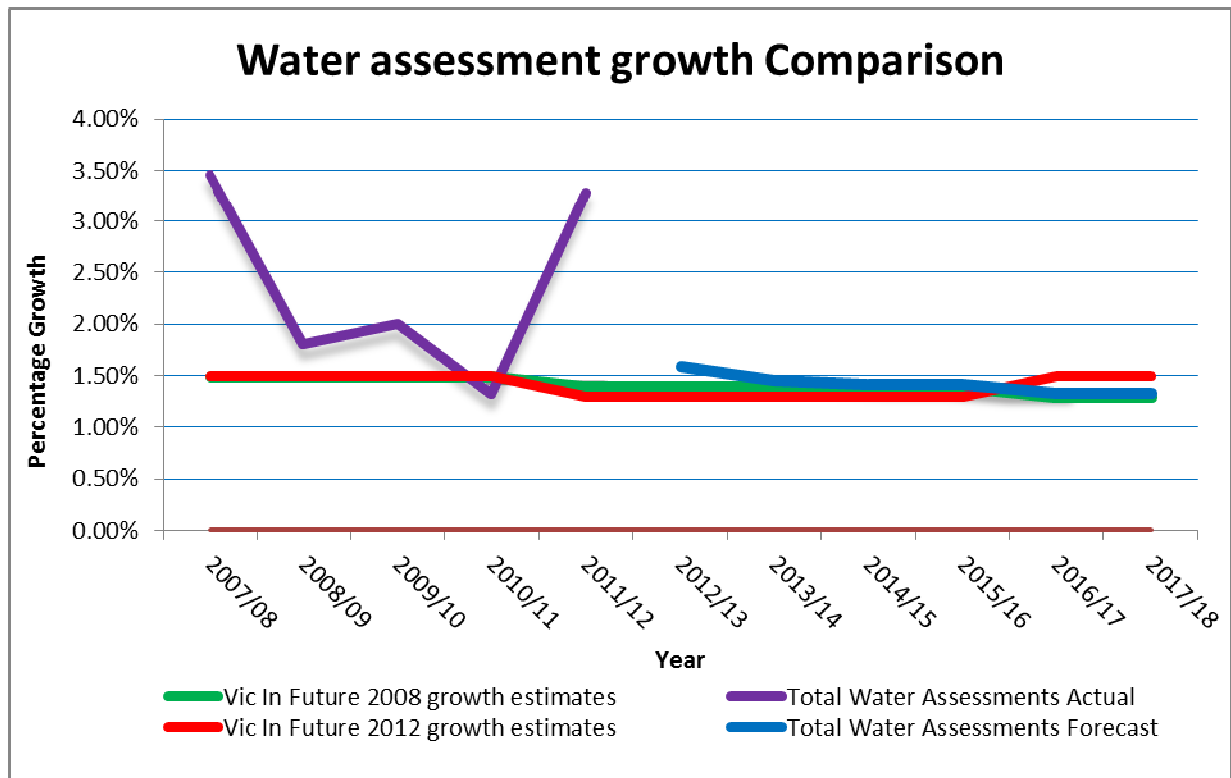
	2011	2016	2021	2026	2031
Total Population	44,680	47,581	51,149	54,958	58,808
Pop. in private dwellings	44,059	46,883	50,374	54,069	57,767
Households	18,840	20,455	22,393	24,406	26,450
Average household size	2.339	2.292	2.250	2.215	2.184

Household types	2011	2016	2021	2026	2031
Couple-only	6,870	7,678	8,563	9,409	10,167
Family with children	5,909	6,054	6,283	6,545	6,915
One-person	5,535	6,174	6,978	7,857	8,728
Other	526	550	568	595	640

	2011-2031	2011-16	2016-21	2021-26	2026-31
Change in population					
Net	14,128	2,901	3,569	3,808	3,851
Average annual	1.4%	1.3%	1.5%	1.4%	1.4%
Change in households					
Net	7,610	1,615	1,938	2,014	2,044
Average annual	1.7%	1.7%	1.8%	1.7%	1.6%

Figure 4: Overall Growth for East Gippsland

Growth for EGW's region is therefore forecast at 1.45% for 2013/14, 1.41% for 2014 to 2016 and 1.33% for 2015/16 and beyond. This aligns with the sum of Victoria In Future 2012 growth estimates for the East Gippsland Shire region across the WP3 period. The expected growth in assessments forecast for EGW based on the analysis of the above data sets is summarised in Graph 10.



Graph 10: Water Assessment Growth Comparison 2007 to 2018

In summary:

- ④ aggregate 6.9% growth forecast for the five-year WP3 period of the plan matches Victoria in Future 2012 forecast;
- ④ the growth forecast differs slightly for individual years, but matches with the aggregate of Victoria In Future 2012 growth;
- ④ forecasts align with those of the East Gippsland Shire across the WP3 period;
- ④ Victoria In Future 2012 assumes a slowdown in the early years of the WP3 but increasing slightly in later years. EGW forecasts a gradual decrease in growth over the same period; and
- ④ most of the customer growth is predicted to occur in Bairnsdale and the coastal areas of the region including Lakes Entrance, Paynesville, Metung and Marlo. The smaller outlying towns including Swifts Creek, Omeo and Bruthen are expected to have only minimal growth.

9.3. Water Demand Forecast

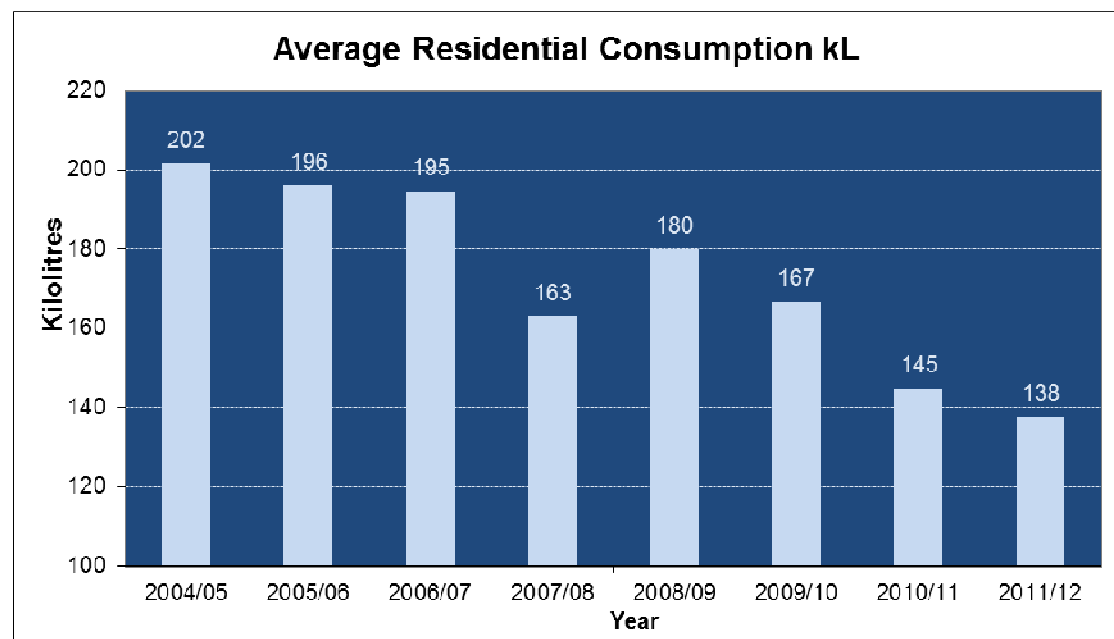
Determination of the demand forecast for WP3 has primarily relied on actual water consumption history across EGW. Significant modelling was undertaken by EGW and also by Intelligent Software Development who were independently commissioned by the ESC.

The three key themes that have impacted EGW's water demand modelling for WP3 are:

1. the strong pattern of reduced residential customer water consumption over the last five years. The decline is particularly evident over the last four years where average residential household use has decreased from 180kL (2008/09) to 138kL, or 23%;
2. the decision to adopt a higher proportion of volumetric charge throughout WP3 to achieve 40% fixed and 60% volumetric by 2018;
3. the connection of wastewater charges to water consumption for non-residential customers, potentially creating an incentive for non-residential customers to reduce water use as their wastewater charge will reflect water use.

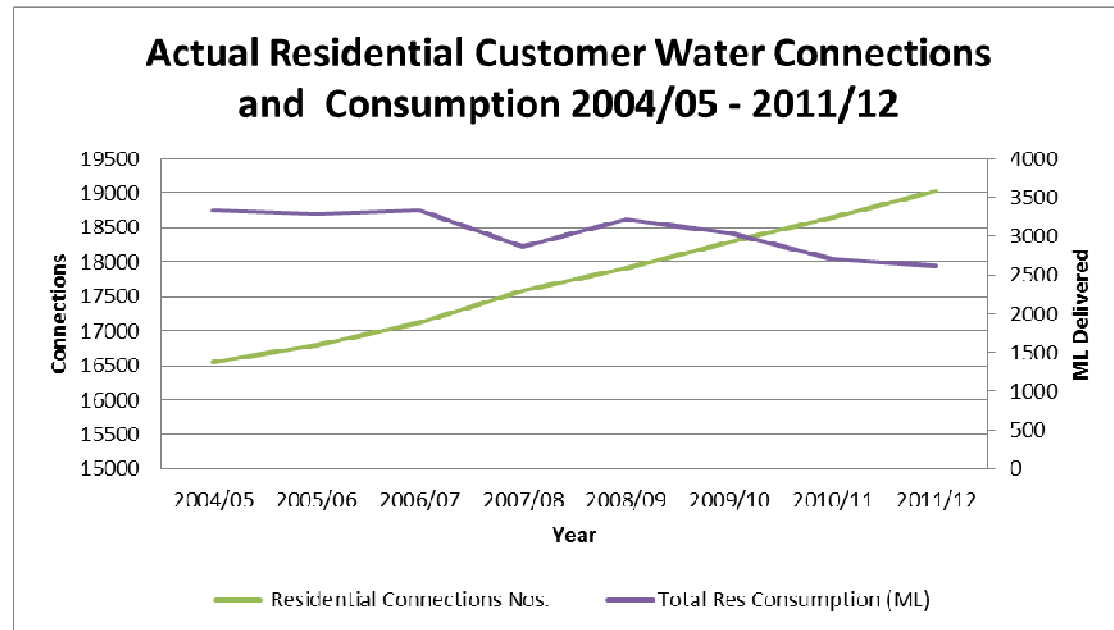
9.3.1. Residential water use

Over the past five years there has been a strong pattern of reduced residential water consumption. This change in water use is attributed to changes in customer behaviours and their investment in water efficient technologies. Graph 11 shows the magnitude of change in demand for water across EGW's residential customer base over the last six years. This has been particularly evident in the last four years where average residential household use has decreased from 180kL in 2008/09 to 138 kL in 2011/12. This decline has continued even though there have been no water restrictions in force in the region over this period of time. Furthermore, the notable spike in 2008/09 water use can be directly attributed to large bush fires in the area in that year.



Graph 11: Average Residential Customer Consumption from 2005

The decline is further supported when the growth in connections are superimposed against consumption, as demonstrated in Graph 12. This shows that even though connection numbers have increased, total water delivered to residential customers continues to decline.



Graph 12: Residential Customer Growth versus Connections

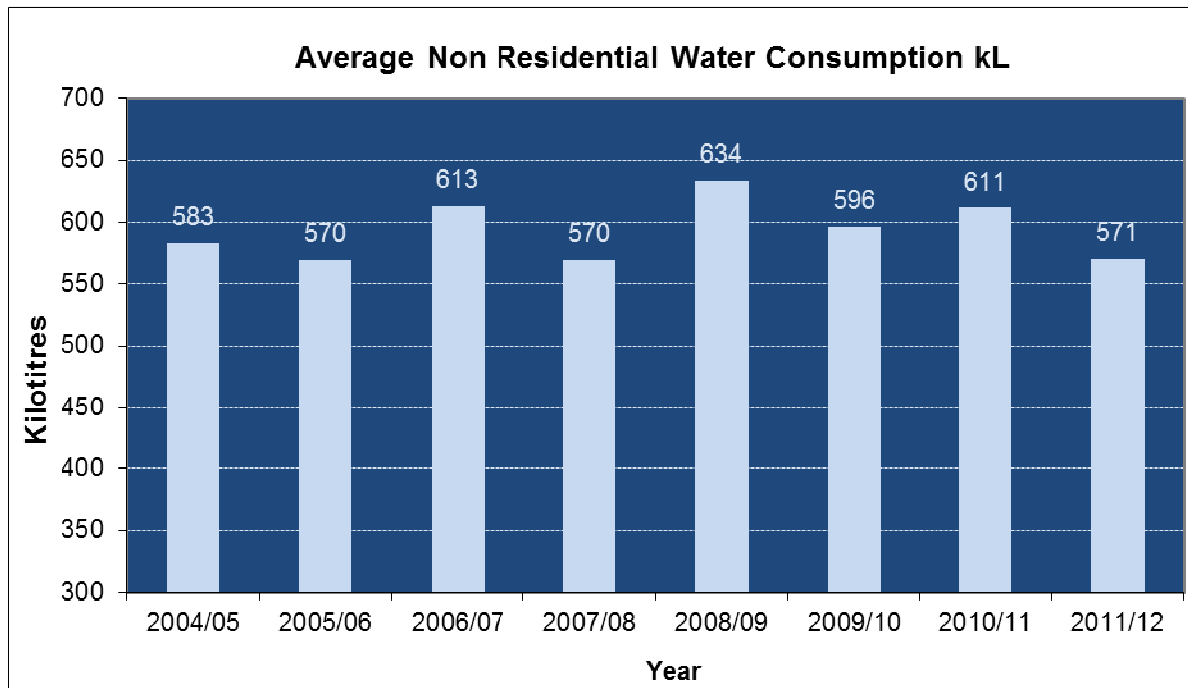
EGW modelled various scenarios of residential customer demand to estimate the impacts of low, medium and high water usage. These scenarios can be seen in Table 19.

Table 19: Demand Modelling Residential Customers for WP3

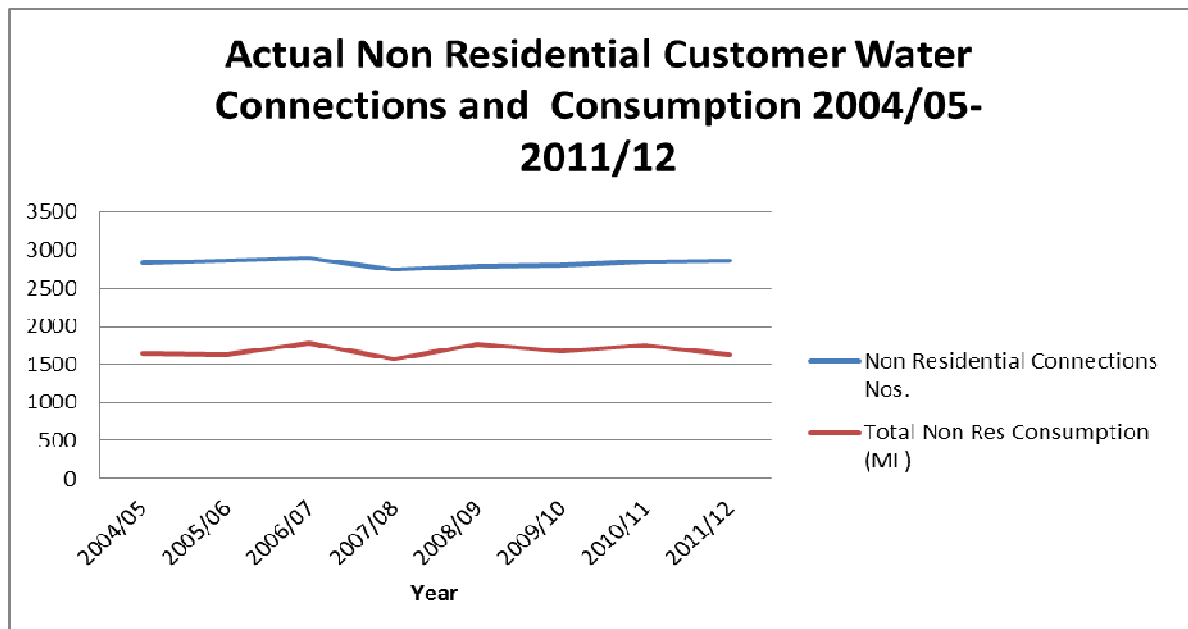
Draft Water Plan Year	Average Residential Demand Forecast (kL)	ESC Model Results (kL)	Revised Upper Level Forecast (kL)	Revised Medium Level Forecast (kL)	Revised Lower Level Forecast (kL)
1	120	166	155	145	130
2	120	164	155	145	130
3	120	163	155	145	130
4	120	162	155	145	130
5	120	161	155	145	130

9.3.2. Non-residential water use

In contrast, non-residential customers' water use patterns have remained relatively stable. Graph 13 shows the average use for non-residential customers between 570 to 634kL across this period. This is further strengthened when the total non-residential water consumption is tied directly to the number of connections (see Graph 14).



Graph 13: Non- Residential Customer Consumption from 2005



Graph 14: Non- Residential Customer Connections versus Consumption

EGW also modelled scenarios to estimate the impacts of low, medium and high water usage across the non-residential customer base. The various scenarios modelled can be seen in Table 20.

Table 20: Demand Modelling Non-residential Customers for WP3

Draft Water Plan Year	Average Non-Residential Demand Forecast (kL)	Revised Upper Level Forecast (kL)	Revised Medium Level Forecast (kL)	Revised Lower Level Forecast (kL)
1	510	610	570	550
2	510	610	570	550
3	510	610	570	550
4	510	610	570	550
5	510	610	570	550

An overall picture for residential and non-residential customer usage and connection numbers over the last six years can be seen in Table 21.

Table 21 Total Customer Usage 2007-2012

Year	Customer type	Connection Nos.	Consumption kL	Average customer connection consumption kL
2011/12	Residential	19030	2620	138
	Non residential	2864	1634	571
	Total	21894	4254	194
2010/11	Residential	18652	2700	145
	Non residential	2848	1741	611
	Total	21500	4441	207
2009/10	Residential	18294	3049	167
	Non residential	2801	1671	596
	Total	21095	4720	224
2008/09	Residential	17915	3224	180
	Non residential	2788	1767	634
	Total	20703	4991	241
2007/08	Residential	17582	2867	163
	Non residential	2750	1567	570
	Total	20332	4434	218
2006/07	Residential	17132	3334	195
	Non residential	2893	1773	613
	Total	20025	5107	255

9.3.3. Wastewater volumes

Wastewater volumes are forecast to remain relatively consistent, as a proportion of water consumption. EGW uses a one-part tariff (a single service fee with no volumetric component) for wastewater services, wastewater volumes play no direct part in revenue collection from residential customers. There are indirect linkages to demand which are explored in the price elasticity of demand in Section 9.5.2.

9.4. Bounce Back and Price Elasticity of Demand

9.4.1. Bounce back

EGW does not foresee a rebound in water use over WP3, instead it is predicted that demand will reach its discretionary limit and remain steady for the five years. This is further supported by the fact that EGW have not had any restrictions from 2007 but customer water use continues to drop significantly. Customer behaviour has been directly influenced by water conservation messages across Victoria and Australia, leading to significant changes in water use attitudes. This has also resulted in customers augmenting their individual supplies through the use of water efficient appliances, grey water systems and tanks and converting gardens to be more drought tolerant and require less water.

9.4.2. Price elasticity of demand

EGW has considered the effects of price on water demand for WP3. Based on tariff structures outlined in Chapter 9, EGW expect to be able to deliver a ratio of 60% volume and 40% fixed water charges for the average residential customer by year five of WP3. This is in line with customer expectations to have more control over their individual bills. Effectively this means that the 'water use component' of each customer's bill will increase by 52% over the five years of the plan.

However, for an average residential customer with a forecast real price increase of 1.66% over the life of the plan, there is no apparent motivation for further demand increases or decreases consistent with price elasticity. Non-residential customers have experienced a 52% increase in water volume price over the last eight years and there has been no real fluctuation in usage patterns. This demonstrates to EGW that price elasticity of demand will not have an impact on usage of residential and non-residential customers.

Consideration has also been given to the implementation and review of Equivalent Tenement (EQT) wastewater charges for non-residential customers. This revised methodology ties the number of EQTs that relate to a non-residential property back to the average water use of the property for the previous three years. Although this could increase the potential for water demand to become more price sensitive for non-residential customers, EGW believe the linkage is remote, and the demand figures that have been modelled adequately to account for this risk.

9.5. Over/Under Recovery of Revenue from Demand

In recognition of the inherent risk of getting demand estimates wrong, EGW has endorsed two key decision tables for scenarios where there is with an over or under recovery of volumetric usage revenue. These are presented below.

Decision table for if demand exceeds estimates:

Demand Outcome	2013/14 Extra revenue	2014/15 Extra revenue	2015/16 Extra revenue	2016/17 Extra revenue	2017/18 Extra revenue	WP3 Total	Decision Options
On Budget	-	-	-	-	-	-	No action
+ 5% Budget	\$391,620	\$429,775	\$467,538	\$508,363	\$541,994	\$2,339,289	Repay borrowings
+ 10% Budget	\$783,240	\$859,549	\$935,076	\$1,016,726	\$1,083,987	\$4,678,579	Repay borrowings / give back to customers
> + 10% Budget	> \$783,240	> \$859,549	> \$935,076	> \$1,016,726	> \$1,083,987	> \$4,678,579	Repay borrowings / give back to customers

Decision table for if demand is below estimates:

Demand Outcome	2013/14 Reduced revenue	2014/15 Reduced revenue	2015/16 Reduced revenue	2016/17 Reduced revenue	2017/18 Reduced revenue	WP3 Total	Decision Options
On Budget	-	-	-	-	-	-	No action
- 5% Budget	(\$391,620)	(\$429,775)	(\$467,538)	(\$508,363)	(\$541,994)	(\$2,339,289)	Reduce costs where possible
- 10% Budget	(\$783,240)	(\$859,549)	(\$935,076)	(\$1,016,726)	(\$1,083,987)	(\$4,678,579)	Reduce costs/extend borrowings
> - 10% Budget	> (\$783,240)	> (\$859,549)	> (\$935,076)	> (\$1,016,726)	> (\$1,083,987)	> (\$4,678,579)	Extend borrowings /consider reopening

9.6. Final Proposed Demand

The finalisation of the demand analysis involved various presentations to the Board and scenario analysis to identify upper and lower limits for the forecasting methodologies. Ultimately, given the significant revenue impact experienced in WP2, the lower tolerance limits of demand were selected to mitigate the risk to the financial viability of EGW.

Based on forecast connection growth, declining customer usage level, security of EGW's supply levels and no predicted rebound or impact from price elasticity, EGW consider the appropriate demand figures for WP3 is 130kL for an average residential customer and 550kL for a typical non-residential customer.

Based on all of the above analysis, EGW's proposed growth and demand for WP3 is shown in Table 22.

Table 22: Total Growth, Consumption and Average Demand for WP3

Details		Year 1	Year 2	Year 3	Year 4	Year 5
		2013-14	2014-15	2015-16	2016-17	2017-18
% growth	Residential	1.50%	1.45%	1.45%	1.36%	1.36%
	Non Residential	1.10%	1.10%	1.10%	1.10%	1.10%
	Overall % increase	1.45%	1.41%	1.41%	1.33%	1.33%
Connections	Residential	19,594	19,878	20,166	20,440	20,718
	Non Residential	2,956	2,989	3,022	3,055	3,088
	Total	22,550	22,866	23,187	23,495	23,807
Consumption	Residential	2,547	2,584	2,622	2,657	2,693
	Non Residential	1,626	1,644	1,662	1,680	1,699
	Total	4,173	4,228	4,283	4,337	4,392
kL per connection	Residential	130	130	130	130	130
	Non Residential	569	550	550	550	550

10. Tariffs

10.1. Introduction

The WIRO requires prices to provide EGW with a sustainable revenue stream while not reflecting monopoly rents or inefficient expenditure. Substantial work over the WP2 period has been completed to identify how tariffs should be structured for EGW's customers. The overriding objective is to ensure equity between customers via efficient signals about the costs to provide services whilst also providing incentives for sustainable water use.

The tariffs have been developed for WP3 to reflect the same structure as WP2. This is because EGW believe the current tariff structure meets the ESCs expectations of being simple, understandable and cost reflective.

The high level principles for tariff structures in WP3 are:

- Ⓐ rebalancing the charges for water and wastewater services to reflect the cost of those services;
- Ⓐ ensuring the wastewater service charge for all customers reflects the cost of supplying the service based on a unit equal to average household demand or EQTs;
- Ⓐ increasing the volumetric water component of water tariffs as a proportion of the water account;
- Ⓐ reducing the fixed charge that applies to a vacant unconnected property;
- Ⓐ recovering costs on a postage stamp basis.

10.2. Tariff Structures

A summary of EGW's main tariff structures for WP3 are as follows:

Retail water tariff

This is a two part tariff, made up of a fixed charge and a variable charge. It reflects the cost to EGW to provide water to a customer. Over WP3 the variable part of this tariff will increase to a point where 60% of the tariff reflects the amount of water used and 40% is fixed for an average residential customer. Based on customer consultation, EGW believes this accurately reflects what customers want and supports Government expectations.

Wastewater service tariff

This is a one part fixed tariff. It is based on an EQT, which reflects the amount of wastewater collected, discharged and treated by an average domestic house. The EQT charging principle allows EGW to collect the amount of revenue needed to cover the cost of providing this service as well as providing equity within the customer base. This principle was enshrined through the Victorian Civil and Administrative Tribunal in 2011. More than one EQT may be charged to a property if its wastewater discharge to sewer is assessed as greater than an average domestic household.

Trade waste tariff

This tariff is made up of a fixed fee for compliance and audit. EGW have a minor and major class of trade waste customers. Minor trade waste customers only receive the fixed compliance/audit fee. Major trade waste customers may receive an extra charge to treat trade waste based on the Mogden formula which assesses volume and load concentration of waste discharged into the sewerage system.

This is a change from WP2 in that there will be no variable or per kL component for trade waste in WP3 as this is considered in the EQT methodology (volume) and via the Modgen formula (strength).

EGW has developed trade waste fees and charges based on the following principles:

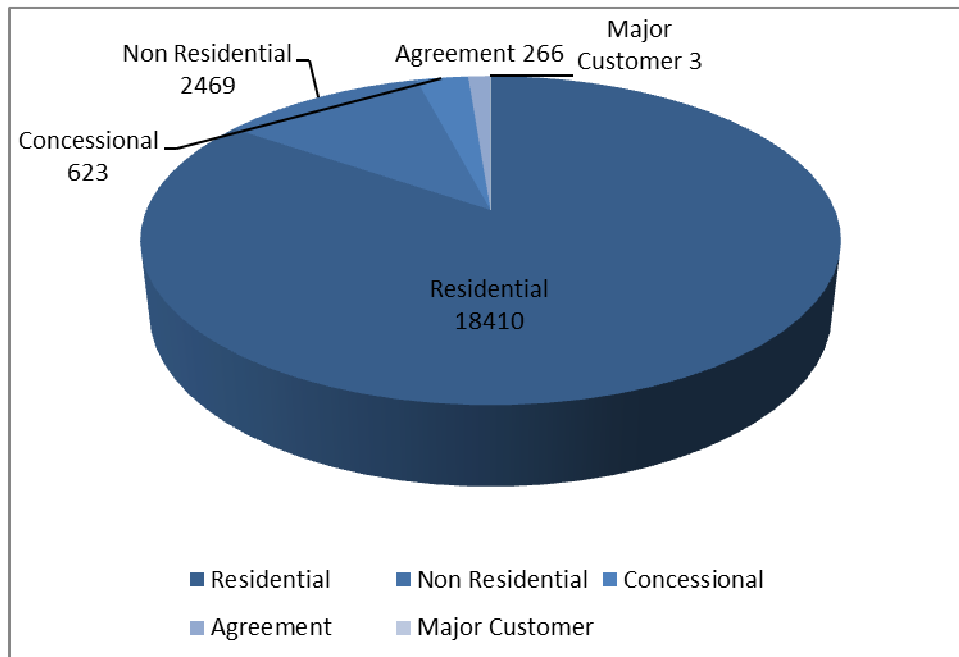
- ④ allocate costs to trade waste customers that are generated by their use of the sewerage system (i.e. to ensure that residential customers do not cross subsidise their costs);
- ④ allocate costs between trade waste customers by reference to the main cost drivers of collection, treatment and disposal (i.e. volume and strength of the trade waste);
- ④ send appropriate price signals to trade waste customers to encourage pre-treatment, reduced discharge and increased opportunities for recycling in line with the EPA's principles of waste hierarchy;
- ④ establish a pricing structure that is easy to understand.

10.3. Proposed Tariffs for WP3

10.3.1. Water tariffs

The fixed component of the two part tariff reflects the meter size servicing the property and the volume charge is a set dollar rate for each 1000L of water used.

EGW's customer segments are shown in Graph 15 and defined further on the following page.



Graph 15: EGW Water Customer groups

Residential

A residential property is defined as a property that is provided for domestic purposes and includes houses, flats, units, townhouses, rural residences, police dwellings, retirement villages or any other properties that have similar water behaviour to a “House”.

This includes vacant land (undeveloped) serviced by a water main and receiving a bill.

Non-residential

Non-residential properties include all other buildings or vacant land (undeveloped) not defined as “residential”. Generally, this would include properties that have been established for some commercial reason.

Concessional

Concessional properties can be broadly defined as properties to which the public has free access and is not being operated for any private profit. This includes schools, community facilities, churches, sporting grounds and parks.

Agreement

A small number of properties receive water from various sources where the quality or reliability of service is not guaranteed. EGW have agreements with these properties which specify the conditions under which the water is supplied and the charging that will occur.

Major Customer

EGW has a number of major customers that account for a large amount of the water supplied.

Changes to retail water tariffs from WP2

Water usage fee to reach 60% volume 40% fixed

For WP3 all of the fixed water service fees are reducing whilst the water volumetric fee is increasing. This reflects the desired move to a water tariff that is 60% volume based and 40% fixed for an average residential customer.

Customer consultation strongly indicated the desire for customers to have more control over their bills. EGW are willing to respond to customer needs and have selected a form of price control (see below) and demand figure (see Chapter 8) that is reflective of this risk.

Halving of vacant unconnected properties service fees

The other major change for water tariff structures is the halving of the vacant unconnected water service fee. This applies to any vacant lot on a separate title that is unconnected but has access to EGW water services. The halving of this tariff reflects customer feedback about the equity of charging a full water service tariff to customers who have not yet connected to EGW services.

Water tariffs for WP3

Table 23 shows the prices charged per tariff type currently and for WP3.

Table 23 Water Tariffs for WP3

Tariff \$ *	2012/13 Current	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Water Service Fee - 20mm	221.96	228.63	222.58	216.42	210.15	210.94
Water Service Fee - Vacant Unconnected	221.96	114.32	114.32	114.32	114.32	114.32
Water Service Fee - 25 mm	346.83	357.23	347.78	338.15	328.35	329.60
Water Service Fee - 32mm	568.25	585.28	569.79	554.02	537.97	540.00
Water Service Fee - 40mm	887.91	914.52	890.31	865.67	840.58	843.77
Water Service Fee - 50mm	1,387.37	1,428.68	1,390.87	1,352.37	1,313.18	1,318.15
Water Service Fee - 75mm	3,121.60	3,215.10	3,130.01	3,043.38	2,955.18	2,966.37
Water Service Fee - 80mm	3,551.70	3,658.09	3,561.27	3,462.70	3,362.36	3,375.09
Water Service Fee - 100mm	5,549.53	5,717.00	5,565.68	5,411.64	5,254.81	5,274.71
Unmetered Fire Service – 20mm	33.29	34.29	33.39	32.46	31.52	31.64
Unmetered Fire Service – 25mm	52.02	53.58	52.17	50.72	49.25	49.44
Unmetered Fire Service – 32mm	85.24	87.79	85.47	83.10	80.69	81.00

Tariff \$ *	2012/13 Current	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Unmetered Fire Service – 40mm	133.19	137.18	133.55	129.85	126.09	126.56
Unmetered Fire Service – 50mm	208.11	214.30	208.63	202.86	196.98	197.72
Unmetered Fire Service – 75mm	468.24	482.27	469.50	456.51	443.28	444.96
Unmetered Fire Service – 80mm	532.76	548.71	534.19	519.41	504.35	506.26
Unmetered Fire Service – 100mm	832.43	857.55	834.85	811.75	788.22	791.21
Water Volumetric Fee	1.6260	1.8769	2.0330	2.1827	2.3443	2.4681

*Tariffs in 01/01/13 dollars

Postage stamp pricing

All of EGW's service fees, volume fees and unmetered fire service fees are consistent across the region for WP3. This further ensures the tariffs are simple and understandable to customers.

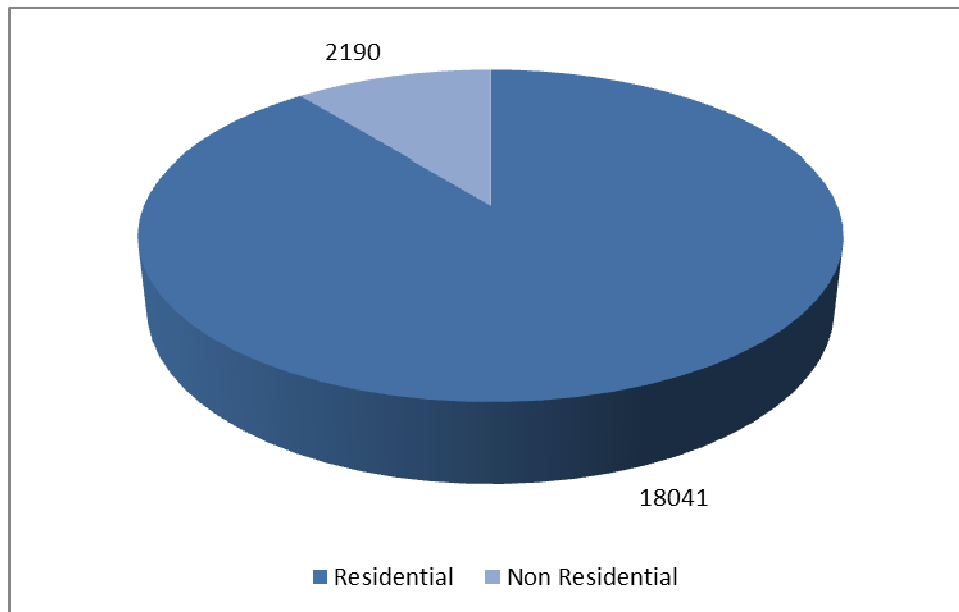
Shared meters

A charge equivalent to a 20mm service charge will apply to each individual property that is connected to a shared meter.

10.3.2. Wastewater tariffs

Wastewater tariffs are a one part fixed charge based on an Equivalent Tenement (EQT). An equivalent tenement is a unit measurement that reflects the amount of wastewater collected, discharged and treated by an average domestic household. More than one EQT may be charged to a property if its wastewater is assessed as greater than a typical domestic house. Definitions for residential and non-residential wastewater properties are the same as described for water properties (see Section 10.3.1)

EGW's major customer groups for wastewater are shown in Graph 16 on the following page.



Graph 16: EGW Wastewater Customer Groups and Total Numbers

Wastewater tariffs for WP3

Table 24 shows the prices charged for wastewater services currently and for WP3.

Table 24: EGW Wastewater Tariffs for WP3

Tariff \$ *	2012/13 Current	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Wastewater Fee (1 EQT)	656.00	635.73	627.21	618.54	604.71	575.63
Wastewater Fee (1 EQT) - vacant unconnected	328.00	317.86	317.86	317.86	317.86	317.86

*Tariffs in 01/01/13 dollars

As with the fixed water tariff, the wastewater tariff also reduces across WP3. This is due to the fact that throughout WP2 reduced water demand and increased costs in the production of water lead to shortfalls in revenue on the water side of the business, whilst at the same time the wastewater costs were lower than the charges EGW levied. When this is rebalanced to align with the cost of providing the wastewater service the fixed charge decreases.

Residential properties are assessed as being one single EQT unless further separate occupiable dwellings are located on the property.

Non-residential properties may be charged more than one EQT if the wastewater discharge to sewer is assessed as greater than an average domestic household. The number of EQTs charged is based on a calculation that takes into account the property's average water use multiplied by an industry accepted discharge factor.

Postage stamp pricing

All of EGW's wastewater service fees are consistent across the region for WP3. This further ensures the tariffs are simple and understandable to EGW's customers.

Dinner Plain was the only locality during the WP2 period, whereby customers were charged a volumetric wastewater fee. Dinner Plain will be brought in line with all other localities in EGW's region, in relation to wastewater tariffs in WP3.

10.3.3 Trade waste tariffs

EGW has two types of trade waste customers:

Major trade waste

Businesses that discharge an unusually large volume and/or high load concentration of trade waste. These businesses (generally larger commercial or industrial type businesses) are required to hold a trade waste agreement before charging trade waste.

Trade waste charges for major trade waste customers are calculated using a modified Mogden formula. This formula brings together the quality parameters in order to calculate the cost of treating the customer's trade waste. The waste stream quality information from the customer's operation and the entry point of the treatment facility are compared to generate a ratio, which is used to calculate cost to the customer. The quality of the waste stream from the customer's operation is based on sampling of the waste on a six monthly basis. This cost of treatment is then passed on to the customer and is calculated using the modified formula below.

The modified Mogden formula is:

$$C = B(O_s/O_t) + S(S_s/S_t)$$

Where:

C = Total Charge for Trade Waste Strength (\$/kL)

B = Unit cost for treatment and disposal of the liquid component of the sewage (\$/kL)

O_s = Chemical Oxygen Demand (COD) of the trade waste measured at the source (mg/L)

O_t = Chemical Oxygen Demand (COD) of the raw sewage coming into the treatment plant (mg/L)

S = Unit cost for treatment and disposal of the solid (sludge) component of the sewage (\$/kL)

S_s = Suspended Solids (SS) of the trade waste measured at the source (mg/L)

S_t = Suspended Solids (SS) of the raw sewage coming into the treatment plant (mg/L)

Minor trade waste

A business that has a trade waste apparatus or other form of onsite treatment of the waste discharged to the sewer. This includes businesses that should have such a device.

These businesses (generally small commercial type businesses) are required to hold a trade waste agreement before discharging trade waste into the sewer. These businesses produce a trade waste that is greater in volume or strength than domestic sewage, but not to a large degree.

Trade waste inspection and audit fee

All minor and major trade waste customers will be charged an annual service fee for the trade waste compliance audit inspection as per Table 25. This is to recover the ongoing costs of managing and monitoring trade waste agreements.

Table 25 Trade Waste Inspection and Audit Fees for WP3

Tariff \$ *	2012/13 Current	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Trade waste inspection compliance audit	251.00	258.91	263.59	268.35	273.20	278.13

*Tariffs in 01/01/13 dollars

10.3.4. Reuse water tariff

Prices for reuse water are determined by the individual circumstances of each customer taking into account:

- Ⓒ the cost benefit to EGW;
- Ⓒ customer willingness and ability to pay;
- Ⓒ the customer's long term commitment in this type of arrangement;
- Ⓒ other means available to dispose the wastewater.

EGW has a limited number of agreements for the use of re-use water. Agreements are in place with businesses and organisations that are able to use the re-used water for farming and recreational purposes.

10.3.5. Miscellaneous prices

In addition to providing water and sewerage services, EGW also provides other secondary services in connection with its primary prescribed services. These are known as miscellaneous services and are also prescribed services under the WIRO.

The pricing principles adopted by EGW agree with those put forward by the ESC in relation to miscellaneous prices. These prices are set according to actual costs, based on:

- Ⓒ direct third party or contractor invoice cost;
- Ⓒ direct marginal internal costs (including labour, materials and transport costs);
- Ⓒ a fair contribution to overheads.

Common miscellaneous charges

Property Information Statements

A charge for providing a certificate issued in accordance with Section 158 of the, Water Act 1989.

Special meter readings

A charge for providing a certificate which indicates water usage charges up to a specified date. Generally provided, on application, for property sales.

Administration developer fee

A charge to cover administration costs for time spent on processing new developer funded applications.

Water connection fee

A charge to cover the cost of connecting a customer to the system. Customers will be offered a range of water connection services that best meets their needs, from materials only through to complete water connection service to a meter.

Sewerage connection fee

A charge for providing sewer plans and processing applications to connect or modify plumbing.

Table 26 outlines the tariffs for all miscellaneous prices including these common charges.

Table 26: All proposed Miscellaneous Prices for WP3.

Tariff \$ *	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Water connection fee 20mm - connection cost including materials	385.00	385.00	385.00	385.00	385.00
Water connection fee 20mm - complete connection cost to meter	862.00	862.00	862.00	862.00	862.00
Water connection fee 25mm - connection cost including materials	510.00	510.00	510.00	510.00	510.00
Water connection fee 25mm - complete connection cost to meter	1,012.00	1,012.00	1,012.00	1,012.00	1,012.00
Water connection fee > 25mm – connection cost including materials	Actual Cost**	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Water connection fee > 25mm – complete connection cost to meter	Actual Cost**	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Sewerage connection fee	155.00	155.00	155.00	155.00	155.00
Property information statements - standard service	50.00	50.00	50.00	50.00	50.00
Property information statements - premium service	75.00	75.00	75.00	75.00	75.00
Special meter readings	60.00	60.00	60.00	60.00	60.00
Administration developer fee - project costs less than \$5,000	350.00	350.00	350.00	350.00	350.00

Tariff \$ *	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff
Administration developer fee - project costs \$5,001 to \$50,000	\$900 or 6%	\$900 or 6%	\$900 or 6%	\$900 or 6%	\$900 or 6%
Administration developer fee - project costs \$50,001 to \$100,000	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%
Administration developer fee - project costs greater than \$100,001	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%
Bulk water sales/standpipe token water sales/hydrant sales (per kL)	3.75	4.07	4.37	4.69	4.94
Septic tank/non-prescribed industry waste receiving fee (per kL)	20.00	20.00	20.00	20.00	20.00
Resealing fire hose fee	135.00	135.00	135.00	135.00	135.00
Non-core miscellaneous services	Actual cost **	Actual cost	Actual cost	Actual cost	Actual cost

*Tariffs in 01/01/13 dollars

** Actual cost – see principles below

Any other miscellaneous costs not captured above will be recovered using EGW's actual cost calculation according to the principles below:

- ④ reflect the direct costs of service provision (including materials and/or costs associated with contractors);
- ④ reflect the internal costs incurred by the water businesses such as labour, transport and general overheads;
- ④ for new miscellaneous services, excludes costs previously accounted for in approved prices:
 - are transparent;
 - recover direct costs plus a 25% provision for overheads.

10.4. Tariff Choice

EGW does not propose to introduce tariff choices for WP3. This plan includes changes in tariffs from rebalancing water and wastewater charges and shifts towards a higher volumetric percentage for the two-part water tariff. Adding more choice at this stage was regarded as adding complexities to the tariff, which would make them difficult to understand and to communicate to customers. EGW understands that other businesses may propose tariff choices and depending on how successful they are, EGW will review this possibility at a later stage.

10.5. Form of Price Control

The WIRO provides the Essential Services Commission (ESC) with the flexibility to approve individual prices or the manner for calculating or determining prices.

The ESC gives EGW the choice of four forms of price control, each with their own strengths and weaknesses. For WP1 and WP2 EGW used the individual price caps form of price

control. This price control method sets tariff for the duration of the WP2 period at the beginning with no way of adjusting the tariffs across the period. This is one reason why EGW has experienced a significant decline in revenue over WP2 from reduced water sales, as there was no mechanism to allow EGW to adjust tariffs within Water Plan periods to react to changes in customer behaviors. Consequently, EGW has had to bear the loss of approximately \$5.8 million in revenue from water sales in the WP2 period.

For WP3, EGW has selected the weighted average price cap (or price basket) form of price control. This helps to provide price certainty to EGW's customers as the revenue risk for water volume is placed on EGW. This means that if demand continues to decline EGW can not simply adjust prices to recover the reduced revenue (as can be done with a revenue cap). The method does however allow prices to be adjusted by a maximum of 3% up or down each year to better align costs to service provision and mitigate some of the risk.

10.6. Events Requiring Adjustment of Tariffs

During a regulatory period EGW may apply to the ESC to vary approved tariffs or the manner in calculating or determining those tariffs for WP3.

The ESC can only approve the variation if it meets relevant procedural requirements specified in the WIRO and the Statement of Obligations and complies with the regulatory principles set out in Section 14 of the WIRO.

This gives EGW the opportunity to apply to adjust tariffs within WP3 for certain events. This helps alleviate the risk associated with approved prices not allowing sufficient revenue stream if an event that is "unforeseen" or "uncertain" occurs within WP3 and materially affects EGW's financial position. The ESC will further define circumstances where EGW could apply for an amendment.

Primary risks that may result in tariff adjustments for WP3 are:

- ⓐ the Statement of Obligations having not been issued at the time of finalising the plan;
- ⓐ further decreases to water consumption;
- ⓐ natural disasters or extreme weather events.

10.7. Final Proposed Tariffs

Overall tariffs in WP3 for water and wastewater present very little change to the structure applied to customers over WP2. The implementation of postage stamp pricing aligning all customers onto the same tariff rates for WP3 also makes the tariffs both simpler and more understandable. The move to increase the water usage charge across WP3 to achieve 60% volumetric, and 40% fixed for the water component of the bill also provides a signal to customers for the sustainable use of water resources.

The proposed decrease in fixed charges for water and wastewater directly reflects customer feedback and also incorporates a rebalancing of charges to reflect the costs of providing these services. Lastly the choice of price control gives customers certainly and

stability but allows some movement in tariffs to reflect changes in supply or demand. All of these principles are achieved whilst still ensuring the financial sustainability of EGW as reflected throughout this plan.

Table 27 is a consolidated list of all key tariffs proposed by EGW for WP3 including the amount of the tariff, the length of the billing period, the customers the tariff applies to and how the tariff is applied.

Table 27: Summary of Tariff Changes and Impacts Identified to Customers

Tariff \$*	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff	Billing period	Customer Class	Tariff Application
Water Service Fee - 20mm	228.63	222.58	216.42	210.15	210.94	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - Vacant Unconnected	114.32	114.32	114.32	114.32	114.32	Quarterly	Res and Non Residential & unconnected vacant land	Vacant Unconnected Property
Water Service Fee - 25 mm	357.23	347.78	338.15	328.35	329.60	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 32mm	585.28	569.79	554.02	537.97	540.00	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 40mm	914.52	890.31	865.67	840.58	843.77	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 50mm	1,428.68	1,390.87	1,352.37	1,313.18	1,318.15	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 75mm	3,215.10	3,130.01	3,043.38	2,955.18	2,966.37	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 80mm	3,658.09	3,561.27	3,462.70	3,362.36	3,375.09	Quarterly	Res and Non Residential	Pipe Size
Water Service Fee - 100mm	5,717.00	5,565.68	5,411.64	5,254.81	5,274.71	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 20mm	34.29	33.39	32.46	31.52	31.64	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 25mm	53.58	52.17	50.72	49.25	49.44	Quarterly	Res and Non Residential	Pipe Size

Tariff \$*	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff	Billing period	Customer Class	Tariff Application
Unmetered Fire Services – 32mm	87.79	85.47	83.10	80.69	81.00	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 40mm	137.18	133.55	129.85	126.09	126.56	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 50mm	214.30	208.63	202.86	196.98	197.72	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 75mm	482.27	469.50	456.51	443.28	444.96	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 80mm	548.71	534.19	519.41	504.35	506.26	Quarterly	Res and Non Residential	Pipe Size
Unmetered Fire Services – 100mm	857.55	834.85	811.75	788.22	791.21	Quarterly	Res and Non Residential	Pipe Size
Water Volumetric Fee	1.8769	2.0330	2.1827	2.3443	2.4681	Quarterly	Res and Non Residential	Per 1000 litres
Wastewater Fee (1 EQT)	635.73	635.73	635.73	635.73	635.73	Quarterly	Res and Non Residential	Per EQT Unit
Wastewater Fee (1 EQT) - Vacant Unconnected	317.86	317.86	317.86	317.86	317.86	Quarterly	One EQT - Unconnected Vacant Land	Per Unconnected EQT Unit
Trade waste Inspection Compliance/Audit	258.91	263.59	268.35	273.20	278.13	Quarterly	Commercial Trade Waste	Annual Inspection
Water Connection Fee 20mm - Connection Cost including materials	385.00	385.00	385.00	385.00	385.00	On Request	All Customers	Pipe Size/Connection Type

Tariff \$ *	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff	Billing period	Customer Class	Tariff Application
Water Connection Fee 20mm - Complete Connection Cost to meter	862.00	862.00	862.00	862.00	862.00	On Request	All Customers	Pipe Size/Connection Type
Water Connection Fee 25mm - Connection Cost including materials	510.00	510.00	510.00	510.00	510.00	On Request	All Customers	Pipe Size/Connection Type
Water Connection Fee 25mm - Complete Connection Cost to meter	1,012.00	1,012.00	1,012.00	1,012.00	1,012.00	On Request	All Customers	Pipe Size/Connection Type
Water Connection Fee > 25mm - Connection Cost including materials	Actual cost	Actual cost	Actual cost	Actual cost	Actual cost	On Request	All Customers	Pipe Size/Connection Type
Water Connection Fee > 25mm - Complete Connection Cost to meter	Actual cost	Actual cost	Actual cost	Actual cost	Actual cost	On Request	All Customers	Pipe Size/Connection Type
Sewerage Connection Fee	155.00	155.00	155.00	155.00	155.00	On Request	All Customers	Connection Type
Property Information Statements - Standard Service	50.00	50.00	50.00	50.00	50.00	On Request	All Customers	Statement within 5 days
Property Information Statements - Premium Service	75.00	75.00	75.00	75.00	75.00	On Request	All Customers	Statement within 2 days
Special Meter Readings	60.00	60.00	60.00	60.00	60.00	On Request	All Customers	Reading within 2 days

Tariff \$ *	2013/14 Tariff	2014/15 Tariff	2015/16 Tariff	2016/17 Tariff	2017/18 Tariff	Billing period	Customer Class	Tariff Application
Administration Developer Fee – Project costs less than \$5,000	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	On Request	All Customers	Project Cost \$
Administration Developer Fee – Project costs \$5,001 - \$50,000	\$900 or 6%	\$900 or 6%	\$900 or 6%	\$900 or 6%	\$900 or 6%	On Request	All Customers	Project Cost \$
Administration Developer Fee – Project costs \$50,001 - \$100,000	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%	\$3,500 or 5%	On Request	All Customers	Project Cost \$
Administration Developer Fee – Project costs greater than \$100,001	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%	\$5,500 or 4%	On Request	All Customers	Project Cost \$
Bulk Water sales/Standpipe token water sales/Hydrant sales (per kL)	3.75	4.07	4.37	4.69	4.94	On Request	All Customers	Per 1,000 litres
Septic Tank/Non-Prescribed Industry Waste Receiving Fee (per kL)	20.00	20.00	20.00	20.00	20.00	On Request	All Customers	Per 1,000 litres
Resealing Fire Hose Fee	135.00	135.00	135.00	135.00	135.00	On Request	All Customers	Per Resealing

*All tariffs in 01/01/13 dollars

11. Prices

11.1. Introduction

As a result of the various inputs outlined in the previous chapters, EGW will provide the end result for customers' prices over WP3.

EGW have shown the price movements based on averages for the two major customer groups. However the tables can be easily adapted to specific circumstances.

11.2. Average Customer Bill

11.2.1. Residential

An average residential customer in EGW's region can expect a real price increase of 1.66%, or \$18, from what they are paying at the end of 2012/13 to what they will pay at the end of WP3. It is important to note that this is the 'real' price increase meaning that inflation or CPI will be applied to prices over each year of the plan as well as the small increases proposed each year.

The actual prices EGW propose to charge, based on the inputs above, appear in Table 28.

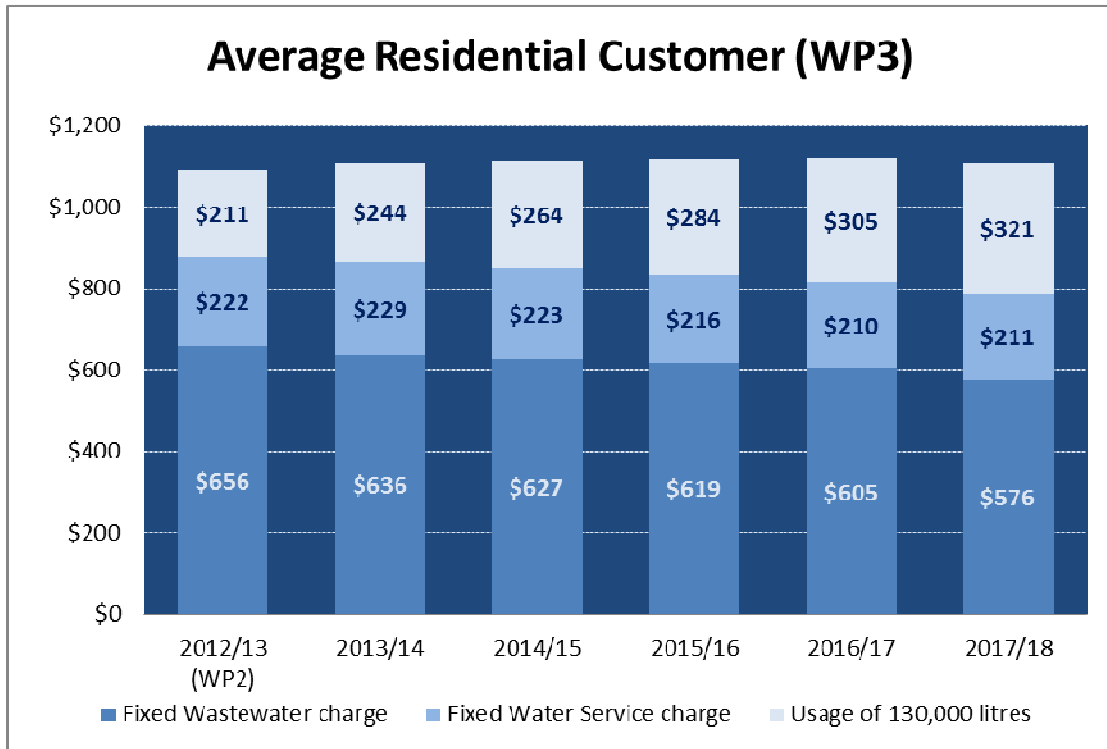
Graph 17 demonstrates the change in bill structure.

Table 28: Average Residential Customer Bill for WP3

Charges \$ *	2012/13 Current	2013/14	2014/15	2015/16	2016/17	2017/18	5 Yr Inc/(dec)
Fixed wastewater charge	656.00	635.73	627.21	618.54	604.71	575.63	-12.25%
Fixed water service charge	221.96	228.63	222.58	216.42	210.15	210.94	-4.96%
Usage of 130,000L	211.38	244.00	264.29	283.75	304.76	320.85	51.79%
Total	1,089.34	1,108.36	1,114.08	1,118.71	1,119.62	1,107.43	1.66%

% of Water Bill variable **49%** **52%** **54%** **57%** **59%** **60%**

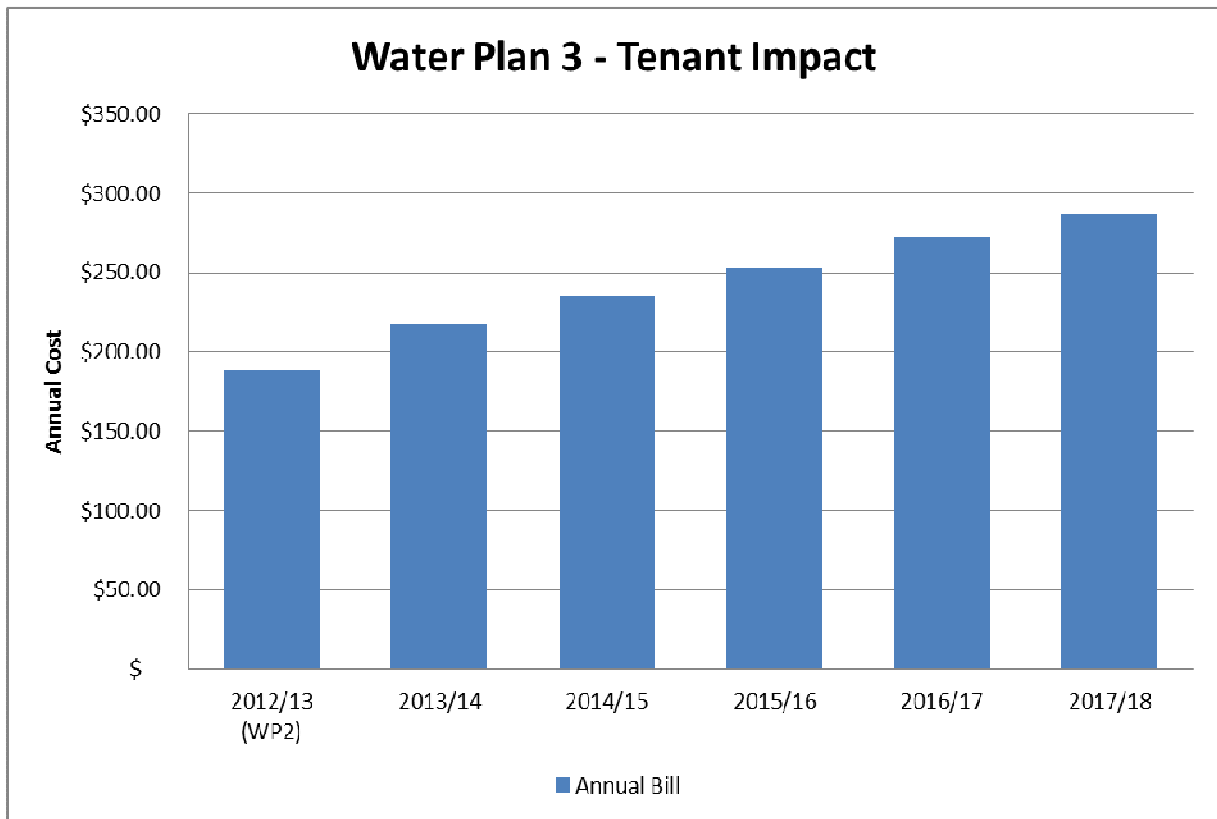
*All charges in 01/01/13 dollars



Graph 17: Average Residential Customer Bill Structure Across WP3

11.2.2. Tenants

An average residential tenant in EGWs region can expect a real price increase of \$98 over the five years of WP3. This is a direct result of moving to a tariff structure where 60% of the tariff reflects the amount of water used and 40% is fixed. EGW have approximately 1900 tenants. Graph 18 shows the increase per year for tenants in 2012/13 dollars.



Graph 18: Change in Tenant Bills over WP3 in Dollars

11.2.3. Non Residential

The typical non-residential customer will have a price increase of 6.88%, over the five years of the plan, or 1.38% per year (plus CPI). The main difference between a residential and non-residential customers bill is the water use charge.

As EGW moves to 60% volumetric, 40% fixed water charge, the price per 1000L of water will increase. Non-residential customers use more water than residential customers, which results in a greater increase in their overall bill. The price increase over the life of the plan will still be minor, \$191 (real), and all EGW customers will have greater control over the total bill as the 60:40 is realised.

The actual prices EGW propose to charge for a typical non-residential customer are in Table 29. A typical non-residential customer has been presented as opposed to an average non-residential customer, in order to capture the cost to a mid-range non-residential customer. The three very large non-residential customers of EGW would skew the data if an average was shown.

Table 29: Typical Non-Residential Customer Bill WP3

Charges \$ *	2012/13 Current	2013/14	2014/15	2015/16	2016/17	2017/18	5 Yr Inc/(dec)
2.5 wastewater charges (fixed)	1,640.00	1,589.32	1,568.03	1,546.35	1,511.78	1,439.09	-12.25%
25mm water service charge (fixed)	346.26	356.66	347.22	337.61	327.83	329.07	-4.96%
486,000L of water use (variable)	790.24	912.19	988.03	1,060.80	1,139.33	1,199.49	51.79%
Total	2,776.49	2,858.17	2,903.29	2,944.77	2,978.95	2,967.65	6.88%

% of Water Bill variable **70%** **72%** **74%** **76%** **78%** **78%**

*All charges in 01/01/13 dollars

To note:

- ⊕ the wastewater charge is decreasing by 12% over the five years, this is a result of the rebalancing of charges to reflect the cost of the service provided;
- ⊕ the fixed water service fee will decrease by 5% as tariffs move to a greater volumetric charge in achieving 60:40;
- ⊕ the charge to purchase 1000L of water will increase by 52% reflecting that there will be a larger proportion of the bill relating to water volume to achieve 60:40.

11.3. Prescribed Price Movement

The prescribed price movement (PPM) is the movement in prices for each year of WP3 after year one or the starting base is set by the ESC. Table 30 shows the predicted price movements across the Water Plan. The table demonstrates largely negative real price movements across the plan apart from the water volumetric fee which increases each year reflecting increased customer control over their bills.

Table 30: Prescribed Price Movement in Tariffs over WP3

Tariff \$ *	2012/13 WP2 Tariff	2013/14 PPM	2014/15 PPM	2015/16 PPM	2016/17 PPM	2017/18 PPM
Water Service Fee - 20mm	\$221.96	3.01%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - vacant unconnected	\$221.96	-48.50%	0.00%	0.00%	0.00%	0.00%
Water Service Fee - 25 mm	\$346.83	2.84%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 32mm	\$568.25	3.00%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 40mm	\$887.91	3.00%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 50mm	\$1387.37	3.00%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 75mm	\$3121.60	2.98%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 80mm	\$3551.70	3.00%	-2.65%	-2.77%	-2.90%	0.38%
Water Service Fee - 100mm	\$5549.53	3.00%	-2.65%	-2.77%	-2.90%	0.38%
Unmetered fire services – all service sizes	\$33.29	3.02%	-2.65%	-2.77%	-2.90%	0.38%
Water volumetric Fee	\$1.6260	15.43%	8.32%	7.36%	7.40%	5.28%
Wastewater Fee (1 EQT)	\$656.00	-3.09%	-1.34%	-1.38%	-2.24%	-4.81%
Wastewater Fee (1 EQT) - vacant unconnected	\$328.00	-3.09%	0.00%	0.00%	0.00%	0.00%
Trade waste inspection compliance audit	\$251.00	3.15%	1.81%	1.81%	1.81%	1.81%

*All charges in 01/01/13 dollars

12. Ten Year Forecasts

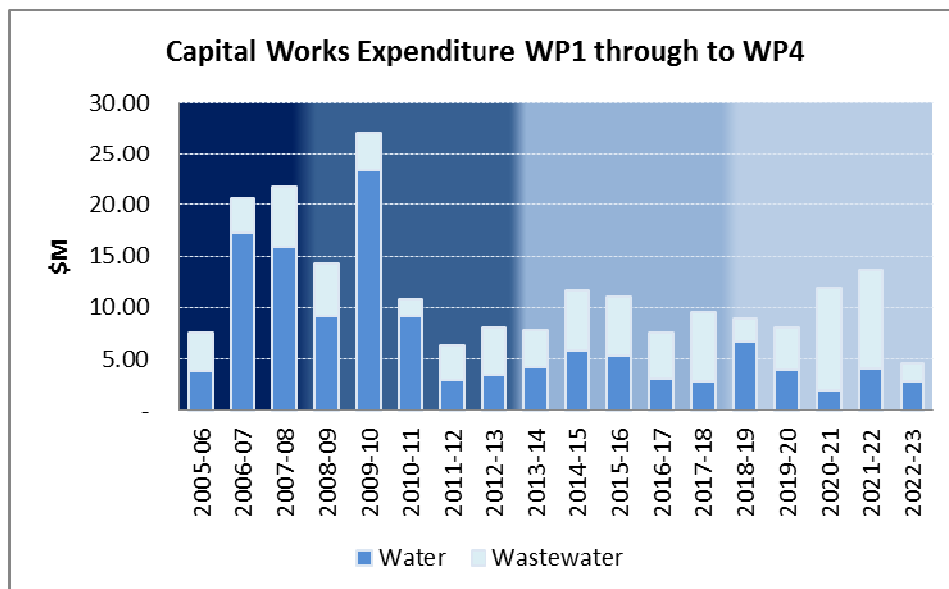
12.1. Introduction

EGW has opted for a five-year price determination from the ESC on account of the complexities involved in identifying obligations required past 2018, customers' service expectations past 2018 and the inability to predict unforeseen events over a longer time period.

EGW have however provided a forecast for a full ten-year period. These forecasts are based on a BAU model where Government obligations, service standards and customer expectation's remain relatively stable for the next ten years.

12.2. Capital Expenditure

EGW's forecast capital program is shown in Graph 19. EGW is moving out of the augmentation phase delivered through WP1 and WP2. There is no spike in spending projected through WP4, instead EGW will focus on renewal and maintenance to keep our existing networks efficient. A higher proportion of spending will go to wastewater after WP1 and WP2 focussed on water projects and augmentation, including the Mitchell water supply program, including a new water treatment plant and storage. Spending on wastewater includes the staged upgrade/replacement of the Bairnsdale wastewater treatment plant as the existing plant nears capacity. This is also to offset forecast increases in operational spending in order to keep the plant in working order.



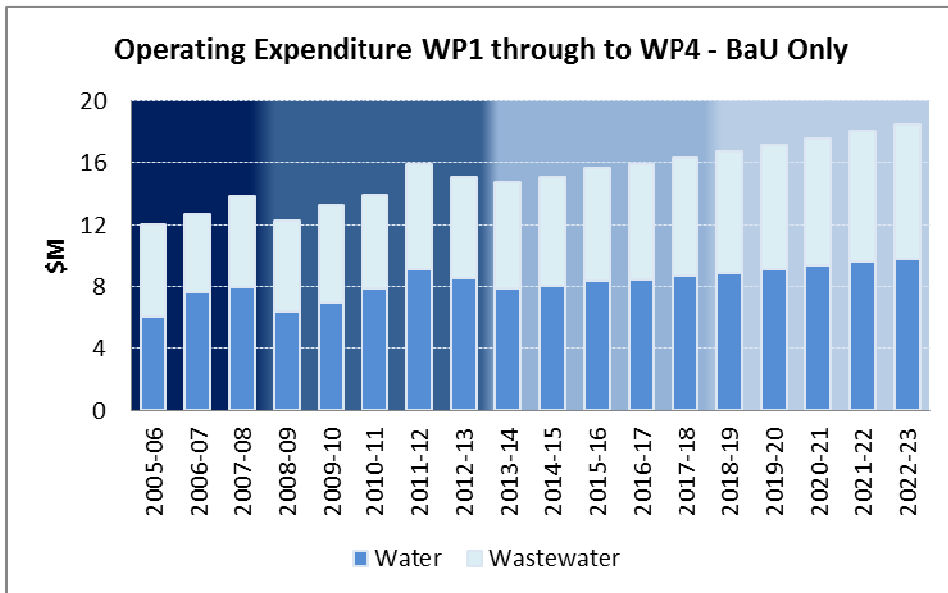
Graph 19: Capital Works Expenditure WP1 to WP4

For a full listing of capital projects for WP4 see **Appendix 2**.

12.3. Operational Expenditure

Graph 20 depicts EGW’s operational spending from WP1 to WP4 (2005 through to 2023). As the graph shows, operational spending has increased over the last ten years, in line with the capital investment in infrastructure.

The major increase in operating expenditure for WP2 is associated with the new water treatment plant at Woodglen. Additional compliance and regulatory requirements placed on the business has meant additional staff have also been required in the WP2 period, but looking forward to the next ten years there will be only minor staff increases for the next ten years.



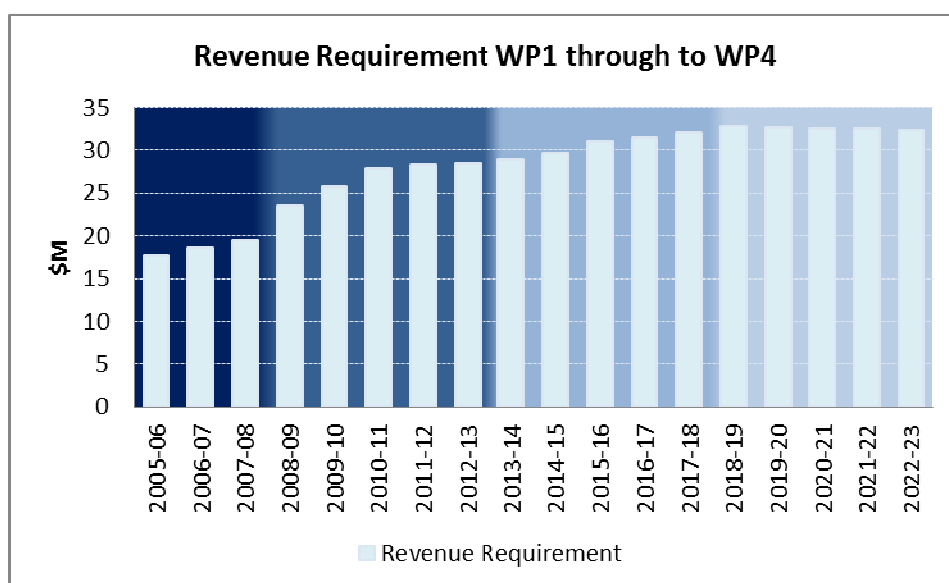
Graph 20: Operating Expenditure WP1 to WP4

12.4. Revenue Requirement

The revenue requirement of EGW has increased significantly over WP1 and WP2 periods. This reflects the capital works investment and the associated operational spending as well as the large jump in compliance and regulatory costs.

The resultant price increases unsurprisingly were significant with prescribed price movements of 5.4% for WP1 and 6.8% for WP2.

The historic and future revenue requirements are shown in Graph 21. The correlation to price increase in WP1 and WP2 as compared to the forecast prices in WP3 & WP4 is clearly evident.



Graph 21: Revenue Requirement WP1 to WP4

12.5. Proposed Water Plan 4 Prices (2018-2023)

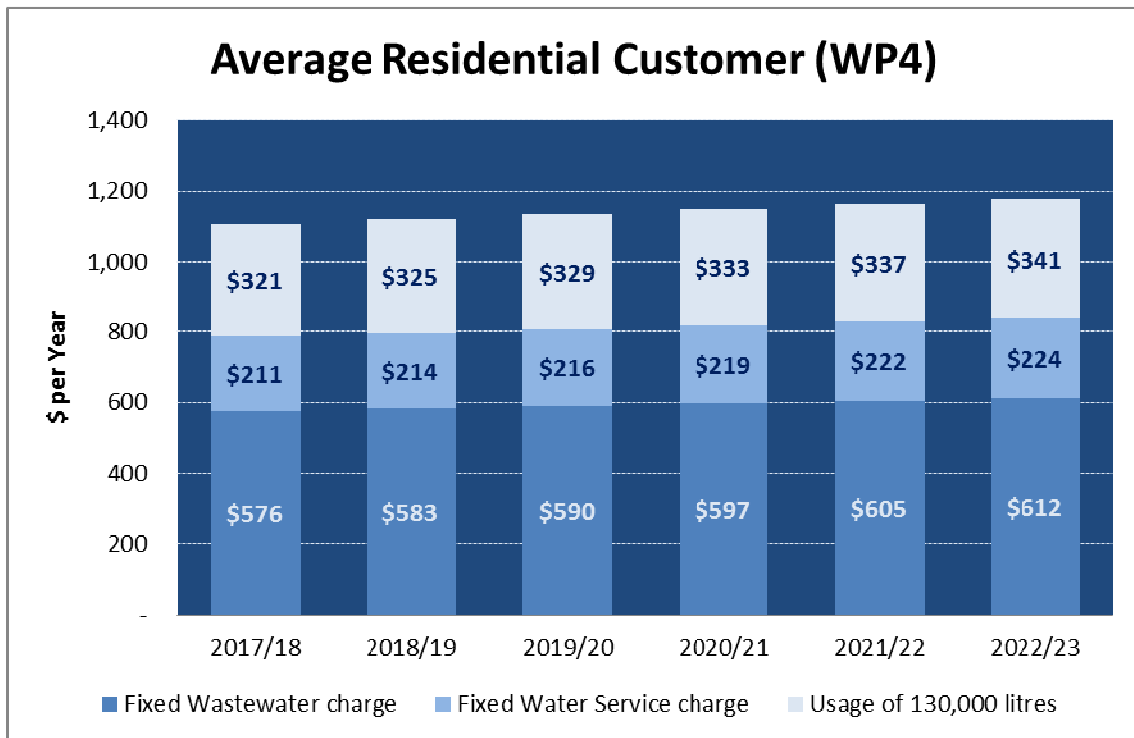
As previously outlined, price increases for WP3 are expected to be marginal and this is expected to continue into WP4. Table 31 shows the proposed prices for an average residential customer and Graph 22 demonstrates the breakup of the bill, while Table 32 and Graph 23 show the same for the typical non-residential customer.

Table 31: Average Residential Customer Bill for WP4

Charges \$*	2017/18 WP3	2018/19	2019/20	2020/21	2021/22	2022/23	5 Yr Inc/(dec)
Fixed wastewater charge	575.63	582.80	590.06	597.41	604.85	612.38	6.38%
Fixed water service charge	210.94	213.57	216.23	218.92	221.65	224.41	6.38%
Usage of 130,000L	320.85	324.85	328.89	332.99	337.14	341.34	6.38%
Total	1,107.43	1,121.22	1,135.19	1,149.32	1,163.64	1,178.13	6.38%

% of Water Bill variable 60% 60% 60% 60% 60% 60%

*All charges in 01/01/13 dollars



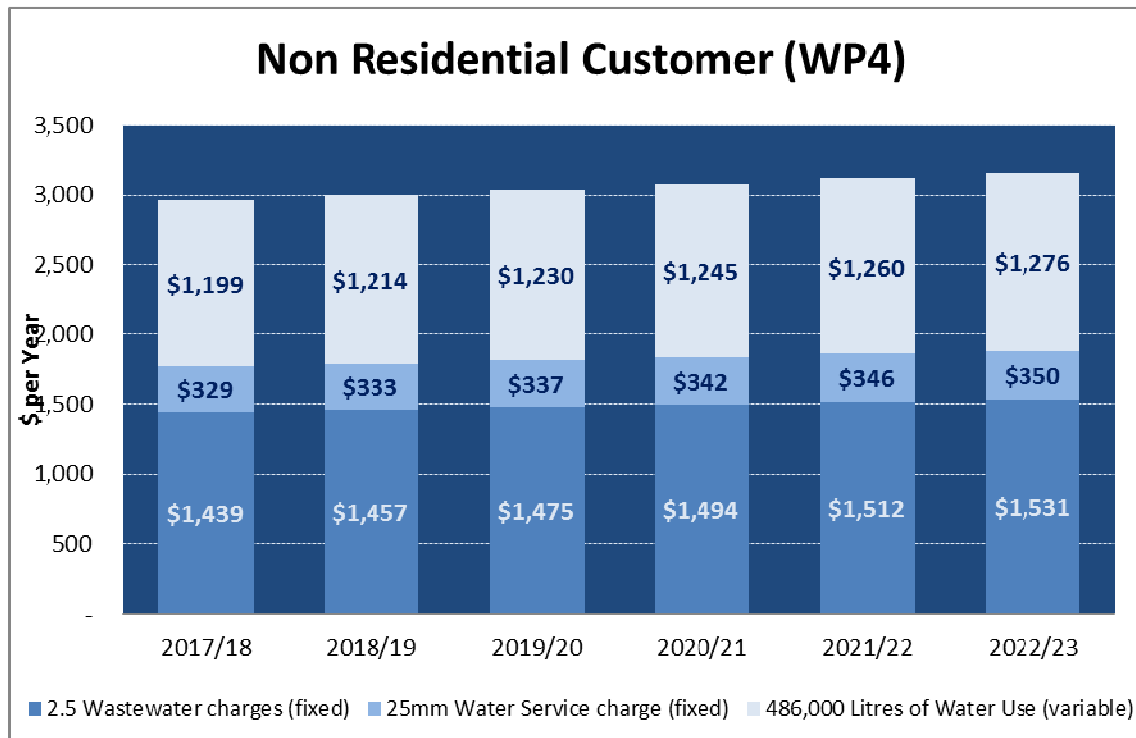
Graph 22: Average Residential Customer Bill for WP4

Table 32 Typical Non - Residential Customer Bill WP4

Charges \$ *	2017/18 WP3	2018/19	2019/20	2020/21	2021/22	2022/23	5 Yr Inc/(dec)
2.5 wastewater charges (fixed)	1,439.09	1,457.01	1,475.16	1,493.53	1,512.13	1,530.96	6.38%
25mm water service charge (fixed)	329.07	333.17	337.32	341.52	345.77	350.08	6.38%
486,000L of water use (variable)	1,199.49	1,214.43	1,229.56	1,244.87	1,260.38	1,276.07	6.38%
Total	2,967.65	3,004.61	3,042.03	3,079.92	3,118.28	3,157.11	6.38%

% of Water Bill variable 78% 78% 78% 78% 78% 78%

*All charges in 01/01/13 dollars



Graph 23: Typical Non-Residential Customer Bill WP4

The prices presented for WP4 in the Sections above are based on the following assumptions:

- Ⓔ a capital spend of \$45.34 million;
- Ⓔ increased operational spend of 2.5% real each year;
- Ⓔ environmental contribution unchanged on account of the average bill only increasing by 1.66%;
- Ⓔ demand remaining at 130kL for an average residential customer and 550kL for an average non-residential customer;
- Ⓔ growth of 1.3% per year;
- Ⓔ no change to the number of EQTs for current non-residential customers;
- Ⓔ Weighted average cost of capital remains at 5.1%;
- Ⓔ no change to existing tariff structures.

13. New Customer Contributions

13.1. Introduction

EGW is committed to and fully support the proposed new framework for New Customer Contributions (NCCs) for the WP3 period. EGW propose to adopt the new framework, as outlined in the document; “Essential Services Commission 2012, Guidance Paper – New Customer Contributions, August 2012”.

EGW will make sure that the new NCCs framework facilitates the efficient and timely connection of new customers on a fair and reasonable basis, taking into account the benefit to the new customer relative to the benefits realised by other customers.

EGW will ensure that NCCs that are payable by property owners for connection of an un-serviced property to water and/or wastewater services, or for increased services to an existing serviced property, have regard to the incremental infrastructure and associated costs and to the incremental future revenues that will be earned from that connection. NCCs will be greater than the avoidable cost of the connection, and less than the standalone cost of the connection.

EGW has chosen to submit final NCC details in December 2012 as per option 2 in the guidance material (August 2012). Therefore between the submission of this plan and December 2012, EGW undertake consultation on the proposed new NCC framework with new connection customers, particularly local key developer agents. EGW will then be able to provide the necessary supplementary information on how the new framework will apply to the Essential Services Commission (ESC) by 7 December 2012. EGW also note that consultation on the NCC framework may continue until March 2013.

13.2. Forecast NCC Growth Capital Expenditure

EGW’s forecast growth capital expenditure and gifted assets, based on the existing NCC framework (WP2 period), together with the revenue forecast, for the WP3 period, is summarised below:

- ④ total WP3 forecast growth Capital expenditure: \$13.745 million;
- ④ total WP3 forecast gifted assets: \$7.71million;
- ④ total WP3 forecast revenue from NCC (existing framework): \$2.5million.

The above forecast does not include growth assets created or enhanced during the WP2 period. During the consultation period EGW will consider the benefits arising from those assets for the WP3 period as appropriate to finalise the supplementary information submission.

13.3. Negotiating Framework

EGW's proposed negotiating framework is based on the pro-forma document, as contained in the above ESC document (August 2012). A draft of EGW's proposed framework is included in **Appendix 3**, and will be used for discussion during the consultation period.

13.4. Final Proposed NCC framework

After consultation and submission of supplementary information to the ESC, the new NCC framework will commence operation from 1 July 2013 in accordance with the relevant legislative requirements, ESC determination, guidance and pricing principles.

14. Appendix 1: Service Standard Target Setting Justification

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Water Service Indicators.				
Unplanned Water Supply Interruptions (per 100Km).	This standard is already at a high level and customers are satisfied with performance. It becomes more demanding to achieve as infrastructure ages, so whilst target is set the same over the period, it becomes more difficult to achieve.	Equal to WP2 target and adjusted 5 year average.	Negligible change to expenditure.	Target replacement or rehabilitation of water mains that have a frequency of bursts or breaks. Bursts are recorded against assets and flagged if frequency increases for that asset. Reduction of water hammer through use of VSDs pumps and proactive planned maintenance/replacement of air valves.
Average time to attend bursts and leaks - Priority 1 and 2 leaks.	Only one priority 1 leak recorded over WP2 period. Priority 2 targets tightened only slightly as performance is already at a high level. It also becomes more demanding to achieve as infrastructure ages, so whilst the target is similar over the period, it becomes more difficult to achieve.	Maintain WP2 target for Priority 1 leaks Priority 2 tightened slightly from WP2.	Negligible change to expenditure. To improve standard would require additional staff, vehicles and cost.	The focus is to reduce frequency of bursts. This will in turn enable current high standards to be maintained
Average time to attend Priority 3 leaks.	These are insignificant small leaks, damp patches on road etc. and do not require urgent attention. They do not impact on customers	The target for this service standard is adjusted for efficiency and greater focus on higher priority leaks.	More efficient target and allows staff to concentrate on planned and proactive work without reacting urgently to leaks that are not impacting on customers.	These leaks are repaired in a planned manner to reduce water losses and are non-urgent.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Average time to rectify Priority 1 and 2 leaks.	Priority 1 to adopt WP2 target as only one Priority 1 incident was recorded over that period. Priority 2 leak target is the 5 average.	Equal to 5 year average	No significant change to expenditure.	Maintain current approach.
Average time to rectify Priority 3 leaks.	This standard is set higher because these types of leaks are small non urgent and insignificant with no adverse impact to customers.	Set between 5 – 3 year average.	No significant change to expenditure	Maintain current approach.
Number of customers receiving one 1,2,3,4,5+ unplanned water supply interruptions in the year.	Improvement made in last 5 years to the number of customers receiving unplanned water supply interruptions.	Improved targets from Water Plan 2 to five year average or better.	Greater proactive maintenance has reduced occurrences of unplanned water supply interruptions.	Maintain current approach.
Number of customers experiencing 5 unplanned water supply interruptions in the year (No.).	The standard is as high as it can be.	Equal to 5 year average	No significant change to expenditure.	Maintain current approach..
Planned water supply interruption's restored within five hours (%).	This standard is set tighter because of the adverse impact to customers. This target is also proposed as a Guarantee Service Level for EGW customers.	Tighter than 5 year average and improved target from WP2.	No significant change to expenditure. There will be a slight increased cost for some jobs because this drives the use of under pressure and hot tappings.	Better planning on jobs and improved management of contractors. Contingencies and use of under pressure tappings.
Planned water supply interruption's not restored within five hours per 100 customers.	See above	5 year average accepted	See above	See above
Average unplanned customer minutes off water supply.	Performance against this standard is already high and customers are satisfied with current performance. It also becomes more demanding to achieve as infrastructure ages, so whilst target is similar over the period, it becomes more difficult to achieve.	Very slightly lower than 5 year average however target is an improvement on WP2. This reflects customer satisfaction with response.	To improve standard would require additional staff, vehicles and cost.	The key operational driver is to reduce bursts as above and carry out planned replacement and installation of isolation valves etc.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Average planned customer minutes off water supply.	This standard reflects the high levels in planned maintenance that have are carried out by EGW. This significantly improves water quality and service to customers. Customers are happy with the service and they know we carry out planned works for their benefit. We keep customers well informed so that it does not inconvenience them. We go out our way to meet the requirements of special needs customers. We carry out work during off peak hours and at night.	Slightly higher than WP2 but better than last 2 years. Standard will improve over the period as we reduce planned works such as cleansing of mains.	No significant change to expenditure. However, undertaking planned works at night to decrease inconvenience does cost more.	Every EGW water main will be cleansed within the next couple of years. This planned work will then reduce while other planned works will continue such as air valve replacement, fire plugs, ring mains etc.
Average frequency of unplanned water supply interruptions.	This standard is already performing at high a high level and customers are satisfied with performance. It also becomes more demanding to achieve as infrastructure ages, so whilst target is similar over the period, it becomes more difficult to achieve.	Equal to 5 year average	No significant change to expenditure.	Target replacement or rehabilitation of water mains that have a frequency of bursting. Bursts are recorded against assets and flagged if frequency increases to trigger replacement. Reduction of water hammer through use of VSDs and planned maintenance/replacement of air valves.
Average frequency of planned water supply interruptions.	As per planned interruptions above.	Commence at equal to 5 year average then improving over the period.	No significant change to expenditure.	This will reduce over the period as mains cleansing is reduced.
Average duration of unplanned water supply interruptions (minutes).	This standard is already high and customers are satisfied with performance. It also becomes more demanding to achieve as infrastructure ages, so whilst target is similar over the period, it becomes more difficult to achieve	Standard is tighter than last period.	To improve standard would require additional staff, vehicles and cost	As described above in unplanned interruptions.
Average duration of planned water supply interruptions (minutes).	As per planned interruptions above	Lower standard than WP2 but improves over the period	No significant change to expenditure.	As described above in planned operations.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Unaccounted for water %.	This gets significantly harder to achieve as infrastructure ages. It is also affected by the present impact of customers using less water, i.e. leakage could be the same but % increases as customer water demand reduces. This situation has occurred over the last 3 years.	Improved on previous years. Accounting methods and meter inaccuracies have been, and continue to be, improved on. It is very difficult to consolidate customer reads with bulk meter reads.	No significant impact; however there is a cost involved via specialist leak detection work, setting up District Metered Areas (DMAs), staff time and remedial works. The cost savings from reducing the losses compensate for the expenditure.	Further leak detection work, setting up of DMAs and pressure management will continue over the period.
Sewerage Service Indicators.				
Sewer blockages (per 100Km).	We set standards very high for this significant adverse impact on customers. Customers are satisfied with service and response.	Improved on WP2 targets.	No significant increase. To improve further will increase costs through additional labour, vehicle, plant and sewer rehabilitation.	Continue with planned and proactive works targeting problem areas, i.e. root cutting, CCTV, inspections, jetting etc.
Average Time to attend Sewer blockages (minutes).	The driver is to reduce blockages in the first instance. Customers are happy with response times and average time increases as the number of blockages reduce.	Equal to last 3 year average.	No significant increase. To improve further will increase costs through additional labour, vehicle, plant and sewer rehabilitation.	Reducing blockages is the key operational driver. Customers are happy with response times.
Average time to rectify a sewer blockage (minutes).	As above. We maintain the high standards of WP2.	Equal to last 3 year average.	No significant increase. To improve further will increase costs through additional labour, vehicle, plant and sewer rehabilitation..	Reducing blockages is the key operational driver. Customers are happy with response times.
Spills Contained within 5 hours (%).	Standard set at 100%.	Maintained target.	No significant increase. To improve further will increase costs through additional labour, vehicle, plant and sewer rehabilitation.	Reducing blockages is the key operational driver. Customers are happy with response times.
Spills to customer properties restored within 5 hours (No.).	Standard set at 100%.	Maintained target.	Negligible.	Reducing blockages is the key operational driver. Customers are happy with response times.
Customers receiving more than 3 sewer blockages in a year (number).	Standard is set at 0	Maintained target.	Negligible.	Reducing blockages is the key operational driver. Customers are happy with response times.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Sewer Spills to customer properties (No.).	Spills to be kept to minimum	Lower than 5 year average	No significant impact on expenditure.	Effort to keep spills low to continue.
Sewer Spills to customer properties per (100 properties).	Spills to be kept to minimum	Lower than 5 year average	No significant impact on expenditure.	Effort to keep spills low to continue.
Sewer Spills within a house (No. Spills).	Spills to be kept to minimum	Lower than 5 year average	No significant impact on expenditure.	Effort to keep spills low to continue. This indicator is tied to a GSL.
Sewer Spills within a house responded to within an hour (No.).	Aim to respond within an hour	Lower than 5 year average	No significant impact on expenditure.	Effort to keep spills low to continue. This indicator tied to a GSL.
Customer Service Indicators.				
Complaints to EWOV (per 100 customers).	We set high standards. Improving our level of service is the driver.	We have a low level of complaints. Target is equal to WP2	Equal to WP2 targets	Provide a high level of service in all areas.
Telephone calls answered within 30 seconds (%).	This standard is set high and customers are satisfied with the service.	Equal to 5 year average.	To improve further will require additional resources and costs for very little return	Maintain this high service. A new telephone system has been installed.
Additional Service Standards.				
Unplanned water supply interruptions restored within 5 hours.	Aim to restore any unplanned interruptions within 5 hours.	Improvement to 5 year average.	No impact on expenditure.	To restore 98% interruptions within 5 hours.
Unplanned water supply interruptions not restored within 5 hours (per 100 customers).	As above	As above	As above	Aim to keep this as low as possible.
Number customer interruptions in peak hours planned.	Planned interruptions in peak hours to be reviewed as this varies for residential and non- residential customers	Maintain targets equal to 5 year average	EGW makes special efforts to limit any water supply disruption to customers. Need to ensure that what is recorded in this category is useful particularly given the differences between peak times of customer types. May cost more operationally to improve this target.	See previous comment.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Number customer interruptions in peak hours unplanned.	Aim to restore any unplanned interruptions as soon as possible.	Maintain targets equal to 5 years average	Unplanned interruptions are more difficult to manage given their unpredictability. Increase in planned maintenance aims to reduce occurrences of unplanned interruptions.	See previous comment.
Total Co2 emissions (tonnes).	Ways to reduce emissions and costs are constantly being implemented. Electricity use is EGW's biggest emission factor and this is largely determined by water demand.	Commence with average 5 year then reduce emission by 1% per annum cumulative.	Costs to reduce emission will be investigated but subject to appropriate business case considerations.	Maintain efforts to reduce Co2 emissions subject to sustainability considerations including costs.
Recycled water target (%).	Maintain 100% reuse target	100%	Negligible or Nil.	Maintain current performance.
Biosolids reuse (%).	Target to be modified to match EPA definition. EGW 100% reuse of available biosolids	100%	Negligible or Nil	Maintain current performance.
Environmental discharge indicators (% compliance).	Target for full 100% compliance remains.	100%	Negligible or Nil	Maintain current performance.
Drinking water quality indicators (% compliance).	Target for full 100% compliance remains.	100%	Negligible or Nil	Maintain current performance.
Complaints received per 100 customers .	EGW has a low complaints record.	5 year average for complaint types proposed which is an improvement on WP2 targets.	Negligible or Nil	Maintain current performance.
Water quality complaints (No.).			Negligible or Nil	Maintain current performance.
Water supply reliability complaints (No.).			Negligible or Nil	Maintain current performance.
Sewerage service quality & reliability complaints (No.)			Negligible or Nil	Maintain current performance.
Affordability & billing complaints (No.).			Negligible or Nil	Maintain current performance.
Flow rate complaints (No.).			Negligible or Nil	Maintain current performance.
Sewer odour complaints (No.).			Negligible or Nil	Maintain current performance.
Other complaints (No.).			Negligible or Nil	Maintain current performance.

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
Flow Rate (litres per minute).	This is in the customer charter and other obligations.	Set equal at 20 litres/min for 20mm connection	To improve further would require significant CAPEX. We meet obligations in all areas.	The Capital works program addresses growth and demand which can impact on the standard.

Explanation of Target Setting for New Indicators

SERVICE STANDARD	BASIS FOR SETTING TARGET	COMPARISON WITH 5 YEAR AVERAGE	COST AND PRICE IMPLICATIONS	TARGET PLAN
GSL Payments (Nos).	The number of GSL payments will be recorded and reported as required	Target equal to zero for the only GSL applicable.	No expenditure allocation made for GSLs.	We propose to include 54 payments per year. This is based on an average of 1 sewer spill per year caused by us, 3 failures to update customer billing information and 50 instances per year where we did not respond to customers written enquiries within 10 working days. We propose to reduce this by 10% each year to reflect ongoing efficiency improvements in these areas.
Website mystery shopper.	This target is proposed to enable website performance comparisons to other Water businesses. EGW agrees with this indicator if it improves the usability of the EGW's website.	Target measure to be developed.	Costs for any website improvements will be considered within current operating budget allocations. Any major improvements will be considered via business case.	No information on reporting this target has been provided at the time of writing this Plan. This will be included once further information is received from the ESC.
Physical visit for water supply or legal action.	EGW ensures that customers are provided with ample opportunity to engage with EGW for any reason. For matters associated with bill payment difficulties where restrictors and or legal action is taken the number of physical visits in each case will be recorded.	Target equal to number of physical visits required as indicated in customer charter and code.	Negligible.	Maintain current performance under the customer code.
Trade waste customers with agreements containing specific acceptance data.	EGW will provide this information.	Not Applicable.	Negligible.	Maintain current performance under the customer code.

Proposed Indicators for WP3 requiring further investigation

These indicators are proposed and EGW is waiting on further advice from the ESC.

SERVICE STANDARD	COST AND PRICE IMPLICATIONS
First call resolution	To be included as part of normal business processes to ensure that customers calls are responded effectively from one contact.
Net promoter score (NPS) or Customer effort score (CES)	To be determined.
Customer Satisfaction Survey	EGW completes a customer satisfaction survey each year. Expenditure allocated to this function will be transferred to the survey proposed by the Commission
Resource security (SEC) Supply volume available to meet demand volume (ML) Demand versus sustainable yield independent supply systems.	This information is included in water supply demand strategies and planning documents, Corporate Plan.
Financial Information FFO interest cover times Internal financing ratio (%) FFO/net debt Net debt/Regulatory Asset Value	Extra costs in providing this information need to be determined.
Productivity Operations maintenance and administration (OMA costs per customer Cost to serve (\$ per customer)	Extra costs in providing this information need to be determined
Innovation	To be determined

15. Appendix 2: Ten Year Capital Works Program (WP3 and WP4)

Ten-Year Capital Works Program (Water Plan 3 & 4)

Details	Water Plan 3 Period (\$ thousands)					5-Year Sub-Total	Water Plan 4 Period (\$ thousands)					5-Year Sub-Total
	2013/14	2014/15	2015/16	2016/17	2017/18		2018/19	2019/20	2020/21	2021/22	2022/23	
Sewerage												
Bairnsdale SMP - new rising main Howitt Ave	90	603	-	-	-	693	6	39	-	-	-	45
Bairnsdale SMP - Wy Yung SPS - Duplication of gravity sewer	29	180	-	-	14	223	93	-	-	-	-	93
Bairnsdale SMP - Bosworth Rd SPS - Provision of offline storages	19	106	23	-	-	148	-	-	-	-	88	88
Bairnsdale SMP - Flinns Rd SPS - Increase pumps capacity & new rising main	158	1,062	-	-	-	1,220	-	-	-	-	60	60
Bairnsdale SMP - Bridge SPS - New rising main	-	246	2,014	-	-	2,260	81	546	105	702	-	1,434
Bairnsdale SMP - Bairnsdale No. 1 SPS - Construction of a new wet well	-	-	-	-	-	-	141	944	-	-	-	1,085
Bairnsdale - Bent St SPS Replacement	210	401	-	-	-	611	-	-	-	-	-	-
Eastwood - Charlton PI SPS review and remove	178	-	-	-	-	178	-	-	-	-	-	-
Bairnsdale - WWTP Upgrade	-	-	-	1,016	4,194	5,210	-	813	6,095	3,555	-	10,463
Bairnsdale - Bridge SPS - Civil/Mechanical improvements	59	-	-	-	-	59	-	-	-	-	-	-
Cann River WWTP - filter cover	-	14	-	-	-	14	-	-	-	-	-	-
Bairnsdale, Paynesville, Lakes Entrance, Orbost and Dinner Plain infiltration	47	297	51	297	51	743	-	-	-	-	-	-
All SPS - Bypass Pumping Arrangements	-	47	58	58	47	210	-	-	-	-	-	-
SPS Renewals	52	63	73	84	84	356	262	262	262	472	399	1,657
Irrigation and Reuse Renewals	157	136	115	142	115	665	-	8	677	212	111	1,008
WWTP Plant Renewals	103	85	157	136	302	783	71	114	84	208	275	752
Sewerage Renewals (below ground)	44	245	91	178	155	713	105	210	157	210	105	787
Irrigation and Reuse Upgrades	284	201	295	437	46	1,263	-	-	-	-	-	-
Gippsland Lakes Foreshore - Asset Protection	-	-	-	157	-	157	210	-	-	-	-	210
WWTP Aerator renewals	173	-	-	346	-	519	-	-	-	346	-	346
STP Lagoon desludge - biosolids management	589	589	589	589	589	2,945	102	102	102	102	52	460
Wastewater Reuse Schemes	42	10	735	-	-	787	21	63	367	336	-	787
All WWTP - Inlet/Outlet metering	-	-	79	63	-	142	-	-	-	-	-	-
Sub-Totals:	2,234	4,285	4,280	3,503	5,597	19,899	1,092	3,101	7,849	6,143	1,090	19,275

Ten-Year Capital Works Program (Water Plan 3 & 4)

Details *	Water Plan 3 Period (\$ thousands)					5-Year Sub-Total	Water Plan 4 Period (\$thousands)					5-Year Sub-Total
	2013/14	2014/15	2015/16	2016/17	2017/18		2018/19	2019/20	2020/21	2021/22	2022/23	
Sewerage												
Dinner Plain Reuse Arrangements	-	-	135	-	-	135	-	-	-	-	-	-
Lakes Entrance SMP - Marine Pde SPS - Upgrade pumps & new rising main	-	842	-	-	-	842	-	-	-	-	-	-
Lakes Entrance SMP - Ferndale Pde SPS - Construction of a new emergency storage tank	-	-	301	-	-	301	-	130	-	-	-	130
Lakes Entrance SMP - Tea Tree Lane SPS - Construction of a new emergency storage	-	-	-	163	-	163	-	-	193	-	-	193
Lakes Entrance SMP - 94 Albatross Rd SPS - Upgrade pumps & construction of new emergency storage tank	-	-	-	-	-	-	-	354	-	-	-	354
Lakes Entrance WWTP - Odour Management	-	-	52	-	-	52	-	-	-	-	-	-
Banksia Peninsula LPSP replacement	20	20	20	-	-	60	-	-	-	-	-	-
Lake Tyers Beach Road SPS Odour Control	-	-	21	-	-	21	-	-	-	-	-	-
Lindenow - WWTP Winter Storage	-	-	-	-	21	21	131	-	-	-	-	131
Full Development of Metung Farm	-	-	-	98	-	98	-	-	-	1,729	-	1,729
Omeo SMP outcomes	-	-	246	-	-	246	-	-	-	-	-	-
Paynesville SMP - P Station upgrade WP3	388	-	-	-	-	388	-	-	1,289	-	-	1,289
Paynesville - Barkhill Rd Farm Power and Watermain	-	-	-	-	182	182	-	-	-	-	-	-
Sub-Totals:	408	862	775	261	203	2,509	131	484	1,482	1,729	-	3,826

Ten-Year Capital Works Program (Water Plan 3 & 4)

Details *	Water Plan 3 Period (\$thousands)					5-Year Sub-Total	Water Plan 4 Period (\$thousands)					5-Year Sub-Total
	2013/14	2014/15	2015/16	2016/17	2017/18		2018/19	2019/20	2020/21	2021/22	2022/23	
Water												
Bairnsdale Elevated Water Tank	38	26	-	-	-	64	-	-	-	-	-	-
Wy Yung - Wy Yung Rural WPS	63	315	-	-	-	378	-	-	-	-	-	-
Mitchell Water Master Plan - Wy Yung Basin Tank	-	-	-	212	900	1,112	1,071	-	-	-	-	1,071
Mitchell Water Master Plan - Aerodrome Booster WPS	-	-	-	-	-	-	-	-	205	-	-	205
Bemm River CWS	-	-	-	-	-	-	109	-	-	-	-	109
Buchan Tank Farm Relining	-	-	-	-	-	-	217	-	-	-	-	217
Cann River - Offtake Raw WPS Upgrade	-	-	33	-	-	33	-	-	-	-	-	-
Cann River WTP - New CWS tank	-	-	-	-	-	-	149	-	-	-	-	149
Cann River Spear Pumps	54	-	-	-	-	54	-	-	-	-	-	-
WTP & WWTP site security improvements	-	-	-	-	-	-	102	-	-	-	-	102
SCADA - Wastewater Management Systems	105	136	126	126	126	619	-	-	-	-	-	-
SCADA - Raw Water Management Systems	-	52	-	89	-	141	-	-	-	-	-	-
SCADA - Renewals & upgrades	52	84	84	231	188	639	-	-	-	-	-	-
SCADA - Clear Water Management Systems	105	105	210	157	105	682	-	-	-	-	-	-
SCADA - Ancillary Management Systems	177	104	84	-	105	470	-	-	-	-	-	-
Misc Renewals	21	21	21	52	37	152	21	21	26	84	73	225
Dam upgrades	52	525	-	525	52	1,154	52	525	-	52	525	1,154
Customers remote meters	-	-	-	-	-	-	37	37	37	37	37	185
WPS Renewals	17	25	27	63	88	220	656	1,502	279	23	52	2,512
Water Treatment Renewals	5	16	173	56	271	521	379	334	64	193	798	1,768
Water Storage Renewals	84	34	38	63	444	663	62	177	102	23	348	712
Water Renewals (below ground)	318	329	339	348	358	1,692	368	378	387	397	406	1,936
WTP Generators	-	-	-	-	-	-	234	-	-	-	-	234
Sub-Totals:	1,091	1,772	1,135	1,922	2,674	8,594	3,457	2,974	1,100	809	2,239	10,579

Ten-Year Capital Works Program (Water Plan 3 & 4)

Details *	Water Plan 3 Period (\$thousands)					5-Year Sub-Total	Water Plan 4 Period (\$thousands)					5-Year Sub-Total
	2013/14	2014/15	2015/16	2016/17	2017/18		2018/19	2019/20	2020/21	2021/22	2022/23	
Water												
WTP Microfiltration at all relevant WTPs	-	-	-	-	-	-	1,351	-	-	-	-	1,351
Howitt Ave WPS Upgrade	-	-	-	-	-	-	735	-	-	-	-	735
Mitchell Water Master Plan - North Arm MSPL Duplication	715	-	-	-	-	715	-	-	-	-	-	-
Lakes Entrance - Sunlakes Bypass Tank	21	-	-	-	-	21	-	-	-	-	-	-
Mallacoota WTP Upgrade - Quality and quantity	-	-	-	-	-	-	90	210	-	-	-	300
Mallacoota WTP - Alternative Chlorination Pilot	-	-	-	-	-	-	64	-	-	-	-	64
Metung water quality issues, replace AC pipe	10	-	-	356	152	518	-	-	-	-	-	-
Modify existing Omeo CWS	-	-	154	-	-	154	-	-	-	-	-	-
Omeo RWS Shadecloth	-	-	-	-	-	-	-	-	299	-	-	299
Orbost WTP electrical upgrades	178	-	-	-	-	178	-	-	-	-	-	-
Marlo MSPL Condition assessment and reconditioning	-	-	-	262	-	262	-	-	-	-	-	-
Brodribb Raw Water Pump Upgrade	-	-	-	-	-	-	31	-	-	-	-	31
Mitchell Water Master Plan - Stage 2 MSPL Upgrade - Eadle Point to Parnesville	-	122	1,371	-	-	1,493	-	-	-	-	-	-
Mitchell Water Master Plan - 2nd Sarsfield Tank or lining basin	189	2,303	-	-	-	2,492	-	-	-	-	-	-
Mitchell Water Master Plan - Replacement Cast Iron Pipe	-	735	-	-	-	735	-	-	-	-	-	-
Stock Exclusion Fencing at Swifts Creek Offtake	41	-	-	-	-	41	-	-	-	-	-	-
Mitchell Water Master Plan - Bulk Storage	546	-	-	-	-	546	105	105	-	1,574	-	1,784
Woodglen UV system	-	-	-	-	-	-	-	-	-	-	-	-
Woodglen WTP Washwater System Augmentation	343	-	-	-	-	343	-	-	-	-	-	-
Sub-Totals:	2,043	3,160	1,525	618	152	7,498	2,376	315	299	1,574	-	4,564

Ten-Year Capital Works Program (Water Plan 3 & 4)

Details *	Water Plan 3 Period (\$thousands)					5-Year Sub-Total	Water Plan 4 Period (\$thousands)					5-Year Sub-Total
	2013/14	2014/15	2015/16	2016/17	2017/18		2018/19	2019/20	2020/21	2021/22	2022/23	
Corporate												
Head Office Refurbishment - air conditioning, ancillary renewals & archives	31	126	-	-	-	157	26	26	26	26	26	130
Head Office Refurbishment - office space augmentation	-	-	-	-	-	-	-	-	-	-	-	-
Corporate Vehicles	764	514	674	664	689	3,305	609	609	609	609	609	3,045
Head Office - Furniture Renewals	48	59	36	39	61	243	51	51	51	51	51	255
Office/Depots Equipment Renewals	162	123	119	82	31	517	51	51	51	51	51	255
Plant & Equipment	127	135	70	-	167	499	720	-	-	-	-	720
IT Hardware & Software improvement (capital expenditure)	787	471	425	612	437	2,732	525	525	525	525	525	2,625
Carbon mitigation / alternative power options	-	-	-	-	-	-	-	-	-	-	-	-
Upgrade Depot sites buildings / storage	47	10	10	-	-	67	-	-	-	-	68	68
Sub-Totals:	1,966	1,438	1,334	1,397	1,385	7,520	1,982	1,262	1,262	1,262	1,330	7,098
Total	7,742	11,517	9,049	7,701	10,011	46,020	9,038	8,136	11,992	11,517	4,659	45,342
Owner Funded Works												
Owner funded works - water	661	661	661	661	661	3,305	630	630	630	630	630	3,150
Owner funded works - sewer	881	881	881	881	881	4,405	1,051	1,051	1,051	1,051	1,051	5,255
Lake Bunga Toilet Block SPS	-	-	32	-	-	32	-	-	-	-	-	-
Surf Club SPS	11	33	-	-	-	44	-	-	-	-	-	-
Sub-Totals:	1,553	1,575	1,574	1,542	1,542	7,786	1,681	1,681	1,681	1,681	1,681	8,405
Grand Total	9,295	13,092	10,623	9,243	11,553	53,806	10,719	9,817	13,673	13,198	6,340	53,747

*all capital project costs 01/01/13 dollars

16. Appendix 3 - NCC Negotiating Framework



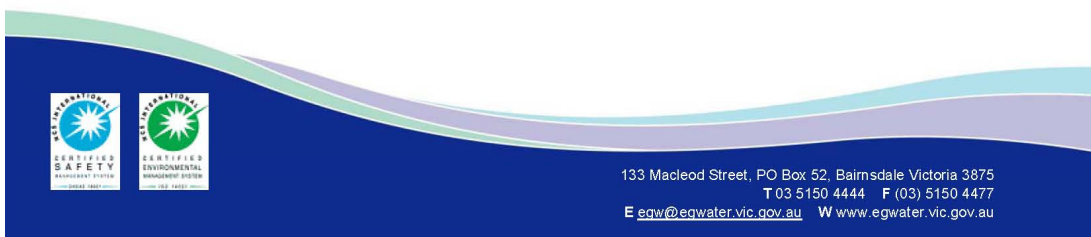
East Gippsland Water



New Customer Contributions Negotiating Framework



27th August 2012

EGW TRIM Ref; DOC/12/28404





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Document Status

Rev No	Comments	Issue Date	Prepared By	Approved By
A	Draft Submission to ESC	27 Aug 2012	Dean Boyd	Brett Millington

1 Application of Negotiating Framework

This Negotiating Framework forms a part of East Gippsland Water's approved water plan for the 2013 - 2018 water plan period. The Framework is based on the sample negotiating framework, which is Appendix B from the document; "Essential Services Commission 2012, Guidance Paper – New Customer Contributions, August 2012".

1.1 Purpose

This Negotiating Framework sets out procedural and information requirements relevant to **services to which developer charges apply**, as defined in the Water Industry Regulatory Order, made under section 4D of the Water Industry Act 1994 (WIRO). It requires East Gippsland Water and any Connection Applicant to negotiate in good faith to agree the price, standards and conditions of services to be provided. It also provides for transparent information to enable the Connection Applicant to understand the reasons for decisions made by the Water Business.

The requirements set out in this negotiating framework are in addition to any requirements or obligations contained in the relevant regulatory instruments, including the; Water Act 1989, Water Industry Act: 1994, WIRO, Essential Services Commission Act 2001, and related regulations, as well as EGW's Customer Charter, and related policies and procedures. In the case of inconsistency between these regulatory instruments and this negotiating framework, the relevant regulatory instrument will prevail.

This Negotiating Framework does not alter the rights of a Connection Applicant to seek a review of a Water Business's decision by the Victorian Civil and Administrative Tribunal.

1.2 Who this negotiating framework applies to

This Negotiating Framework applies to East Gippsland Water and to any property owner, including a property developer, that is a Connection Applicant who requests connection to Water Business's works in accordance with section 145 of the *Water Act 1989* (Vic).

It also applies to East Gippsland Water in responding to such requests from a Connection Applicant.

1.3 No obligation to provide service, good faith obligation

Nothing in the negotiating framework imposes an obligation on East Gippsland Water to allow the Connection Applicant to connect to East Gippsland Water's works or provide services to the Connection Applicant.

East Gippsland Water can refuse its consent, consent, or consent subject to any terms and conditions that East Gippsland Water thinks fit, as provided under section 145(3) of the *Water Act*.

However, East Gippsland Water and the Connection Applicant must negotiate in good faith the price, terms and conditions for services sought by the Connection Applicant.

2 Timeframes

East Gippsland Water and the Connection Applicant will use their reasonable endeavours to achieve the following timeframes:

- (a) Agree the milestones, information requirements and any other relevant issues within [5] days of East Gippsland Water's receipt of an application;
- (b) Adhere to any timetable established for negotiations, and progress negotiations in an expeditious manner; and
- (c) Finalise negotiations within [120] business days of the initial application.

2.1 Commencing, progressing and finalising negotiations

Table 1 below identifies the expected timeframes generally applying. The timeframes for any specific case may be changed to suit particular circumstances.

Table 1: Indicative timeframes for negotiating connection

Step	Actions	Timing
1	Receipt of written application for connection	X
2	Parties discuss: <ul style="list-style-type: none"> • the nature of the services required; • any information to be provided by the Connection Applicant; and • notification and consultation with other persons potentially affected Parties agree: <ul style="list-style-type: none"> • timeframes for negotiation and consultation; and • milestones. Connection Applicant pays application fee.	X + 5 Business Days
3	Connection Applicant provides information to Water Business [East Gippsland Water may request additional information]	X + [20] Business Days [Additional 20 Business Days]
4	Where required, East Gippsland Water consults with others potentially affected	X + [40] Business Days
5	All necessary information is received by Water Business, including:	Y

	<ul style="list-style-type: none"> the completed application; the Connection Applicant's information; and consultation feedback where required. 	
6	East Gippsland Water provides Commercial Information and makes offer (in form of Notice).	Y + [20] Business Days
7	Parties finalise negotiations	Y + [80] Business Days

3 Provision of information by Connection Applicant

The Connection Applicant must provide sufficient information to enable East Gippsland Water to assess needs and to enable determination on the application. Information will usually include a plan of the property and its connection requirements, including its expected current and future demands on the water and or sewerage networks (such as average and peak flow rates, number of equivalent tenements, staging and future demand as appropriate).

The Connection Applicant must provide East Gippsland Water with any additional information if requested by East Gippsland Water.

[Reasonable confidentiality requirements are to be added].

4 Provision of information by Water Business

East Gippsland Water will provide information on its assessment of the application to connect (including cost information) to the Connection Applicant.

Information will be included as required under the Water Act, and as reasonably required by a Connection Applicant in order to satisfy the grounds for review by VCAT under the Water Act.

Information provided by East Gippsland Water under this Negotiating Framework should enable the Connection Applicant to assess its grounds for appeal to VCAT in the event of a dispute (refer to section 9 of this Negotiating Framework document).

[Reasonable confidentiality requirements are to be added here].

5 Pricing Principles

East Gippsland Water's charges will:

- have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- have regard to the incremental future revenues that will be earned from customers at that connection; and

- (c) be greater than the avoidable cost of that connection and less than the standalone cost of that connection.

In setting charges, East Gippsland Water will also comply with:

- (a) the regulatory principles set out in clause 14 of the WIRO; and
- (b) [any specific pricing principles approved by the Essential Services Commission as part of East Gippsland Water's water plan will be added here]

6 Consultation with affected parties

If East Gippsland Water considers that persons other than the Connection Applicant may be affected by proposed connection services, then:

- subject to reasonable confidentiality requirements, East Gippsland Water will share any necessary information with others potentially affected to assess impacts
- parties will allow sufficient time for reasonable consultation with affected parties to occur.

7 Payment of East Gippsland Water's Costs

Should a connection application not proceed within a reasonable timeframe [to be determined], the Connection Applicant will pay East Gippsland Water's costs that it may have reasonably incurred that are directly associated with its assessment of the application.

8 Termination of negotiations

The Connection Applicant may elect not to continue with its application for a service to which a developer charge applies, and may terminate the negotiations by giving Water Business written notice of its decision to do so.

East Gippsland Water may terminate a negotiation under this Negotiating Framework by giving the Connection Applicant written notice of its decision to do so where:

1. East Gippsland Water believes on reasonable grounds that the Connection Applicant is not conducting the negotiation under this negotiating framework in good faith;
2. East Gippsland Water reasonably believes that the Connection Applicant will not acquire any Negotiated Distribution Service; or
3. an act of insolvency occurs in relation to the Connection Applicant.

9 Dispute resolution

The Connection Applicant may apply to the Victorian Civil and Administrative Appeals Tribunal (VCAT) for review of a decision by East Gippsland Water, in accordance with section 145 of the Water Act 1989. Such an application must be lodged with VCAT within 28 days after East Gippsland Water notified the Connection Applicant of its decision (among other things).

Information on VCAT and its processes is available by contacting VCAT or via their website; <http://www.vcat.vic.gov.au>

As an option, East Gippsland Water is committed to resolving any dispute by mutual agreement and in the event of a dispute, East Gippsland Water will endeavour to offer an alternate dispute resolution process. This option would not remove the rights of the Connection Applicant to seek review by VCAT under the Water Act.

10 Giving notices

The address for notices to East Gippsland Water is; PO Box 52 (133 Macleod Street), Bairnsdale Victoria 3875.

Time notice is given: within 28 days, or as otherwise stated in this Negotiation Framework.

11 Terms and abbreviations

Definitions

Connection: is a physical connection to East Gippsland Water's water and/or sewerage networks, by an un-serviced property or an increased service to a serviced property, where the service can be provided by East Gippsland Water.

Connection Applicant: is the person, property-owner, developer or representative who makes an application to East Gippsland Water to connect a property to available water or sewer services.

New Customer Contribution (NCC): is the charge payable by the Connection Applicant upon connection of a property to East Gippsland Water's water and sewer networks. The NCC is established by the relevant regulatory instruments and this Negotiating Framework, as approved by the Essential Services Commission.

Negotiating Framework: is this document, as approved by the Essential Services Commission, and any supporting East Gippsland Water policies and procedures.

[to be completed]

Interpretation

[to be completed]

Figure 2: Indicative timeframes for negotiating framework

