

Draft Report

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## SEQ Price Monitoring for 2013-15 Part B - Gold Coast Water

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January 2014

The QCA wishes to acknowledge the contribution of the following staff to this report:

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## SUBMISSIONS

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This report is a draft only and is subject to revision. Public involvement is an important element of the decision-making processes of the Queensland Competition Authority (QCA). Therefore submissions are invited from interested parties. The QCA will take account of all submissions received.

Written submissions should be sent to the address below. While the QCA does not necessarily require submissions in any particular format, it would be appreciated if two printed copies are provided together with an electronic version on disk (Microsoft Word format) or by e-mail. Submissions, comments or inquiries regarding this paper should be directed to:

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The closing date for submissions is 28 February 2014.

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Information about the role and current activities of the QCA, including copies of reports, papers and submissions can also be found on the QCA’s website.

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# 1 INTRODUCTION

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## 1.1 Background

This is the fourth price monitoring review of monopoly distribution and retail water and sewerage activities in south-east Queensland (SEQ) by the Queensland Competition Authority (QCA). This is the first review of Gold Coast Water.

## 1.2 Ministerial Direction

Under the Ministerial Direction (**Appendix A**), the QCA must investigate the monopoly distribution and retail water and sewerage activities of Unitywater, Queensland Urban Utilities (QUU), Logan City Council, Redland City Council and Gold Coast City Council (GCCC) for the period 1 July 2013 to 30 June 2015. In doing so, the QCA must:

- (a) monitor the change in prices of distribution and retail water and sewerage services for residential and non-residential customers
- (b) monitor water and sewerage revenues against the maximum allowable revenue (MAR) based on the total prudent and efficient costs of carrying on the activity
- (c) advise a benchmark Weighted Average Cost of Capital (WACC) and monitor the WACCs applied by the entities against the benchmark WACC
- (d) provide information to customers about the costs and other factors underlying the provisions of water and sewerage services including distinguishing between bulk and distribution/retail costs.

## 1.3 Scope of review

There are some changes in the scope of the review compared to previous years, arising from the Ministerial Direction. In contrast with previous reviews, there is a two year review period of 2013-15 (instead of one year), there is no legislated Consumer Price Index (CPI) cap which requires separate reporting against capped and non-capped services (as in 2011-12 and 2012-13), and there is a specific requirement to sample six capital expenditure items per entity and review policies and procedures.

Further, the water businesses of Logan City Council, Redland City Council and Gold Coast City Council are now included in the review (these were excluded in 2012-13, following their de-amalgamation from Allconnex Water (Allconnex) on 1 July 2012).

A key focus of the review remains the prudence and efficiency of costs (the MAR) and whether there is evidence of an exercise of market power in comparing revenues and MARs. The QCA's benchmark WACC is used to calculate the MAR. The provision of information to customers about costs also continues from previous years.

## 1.4 Structure of report

This report is one of five entity-specific reports that form Part B. An overview of the price monitoring review and the key findings for all entities forms Part A.

The structure of each Part B report largely follows that of the Direction. Information on prices and bills (chapter 2) and demand (chapter 3) are followed by a review of capital and operating

costs (chapters 4 and 5) which form the MAR (chapter 6). A comparison of revenues and MARs (chapter 7) informs whether there is evidence of an exercise of market power. Data on costs, revenues and prices is summarised (chapter 8) followed by key findings (chapter 9).

## 1.5 Gold Coast Water's water and sewerage services

### Background

In the QCA's first two price monitoring reviews of monopoly distribution and retail water and sewerage activities in SEQ, Gold Coast City Council's water and sewerage functions were undertaken by Allconnex. As with Unitywater and QUU, Allconnex commenced operation as a distributor-retailer on 1 July 2010.

In April 2011, the State Government announced that SEQ councils wishing to return to their previous structure would be able to do that, and those that wish to retain the distributor-retailer entities could also do so.<sup>1</sup>

Subsequently, Gold Coast City Council voted to leave Allconnex and manage its own distribution and retail services.

The *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld) (DR Act) provides that the Gold Coast, Logan and Redland City Councils' water and sewerage businesses be established as commercial business units (CBUs) under the *Local Government Act 2009* (Qld) (LGA).<sup>2</sup>

As per the *Local Government Regulation 2012* (Qld) (LGR), CBUs conduct business in accordance with the key principles of commercialisation.<sup>3</sup> Briefly, these include clarity of objectives, management autonomy and authority, accountability for performance, and competitive neutrality.<sup>4</sup>

The LGR imposes specific financial planning and accountability obligations on local governments,<sup>5</sup> of which some are directly relevant to Gold Coast Water (GCW). For example:

- (a) Gold Coast City Council's budget for each financial year must include financial statements (including balance sheet, cash flow, and income and expenditure) for the budget year and the next two financial years. The statement of income and expenditure must include the estimated costs of the activities of the council's CBUs<sup>6</sup>
- (b) Gold Coast City Council must prepare an annual operational plan (AOP) for each financial year. The AOP must include, among other things, an annual performance plan (APP) for each CBU of the local government<sup>7</sup>
- (c) Gold Coast City Council's annual report for a financial year must contain an annual operations report (AOR) for each CBU.<sup>8</sup>

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<sup>1</sup> The Hon Anna Bligh, Premier and Minister for Reconstruction, Media release 7 April 2011 'Premier says enough is enough - water blame game ends'.

<sup>2</sup> DR Act, s 92AJ.

<sup>3</sup> LGR, ss 27-28.

<sup>4</sup> LGR, s 28.

<sup>5</sup> LGR, ch 5.

<sup>6</sup> LGR, s 169.

<sup>7</sup> LGR, ss 174-175.

<sup>8</sup> LGR, s 190(1)(c).

## Gold Coast Water's services

Gold Coast Water recommenced operations as Gold Coast City Council's water and sewerage CBU on 1 July 2012. Its primary functions are:

- (a) distribution and retail of safe drinking water purchased from the bulk water wholesaler, Seqwater
- (b) collection and treatment of sewage
- (c) release of treated effluent, and provision of recycled water and bio-solids for reuse
- (d) planning, construction and maintenance of infrastructure and assets, including water supply, recycled water and sewerage networks, sewage treatment plants (STP) and release systems.

Gold Coast is Australia's largest non-capital city with a total population of 524,583 (expected to reach around 788,000 people by 2031).

Gold Coast Water's water supply network consists of 3,092km of water mains, 56 water pump stations and 65 water reservoirs, which supply 237,667 water connections with more than 50 gigalitres (GL) of water each year.

The sewerage network consists of gravity and vacuum sewers, rising mains, pump stations, STP and emergency relief structures. The network includes 3,143km of sewer to transfer sewage from customers' properties across five sewage catchment areas to one of four STPs owned by Gold Coast City Council and operated by Gold Coast Water. The Pimpama STP also contains an advanced recycled water treatment facility in which sewage is treated to a Class A+ recycled water standard and distributed to local customers.<sup>9</sup>

Key characteristics of Gold Coast Water's service and asset base appear in Table 1 below. A map of the drinking water catchments in the Gold Coast forms Figure 1.

**Table 1 Gold Coast Water Service and Asset Base**

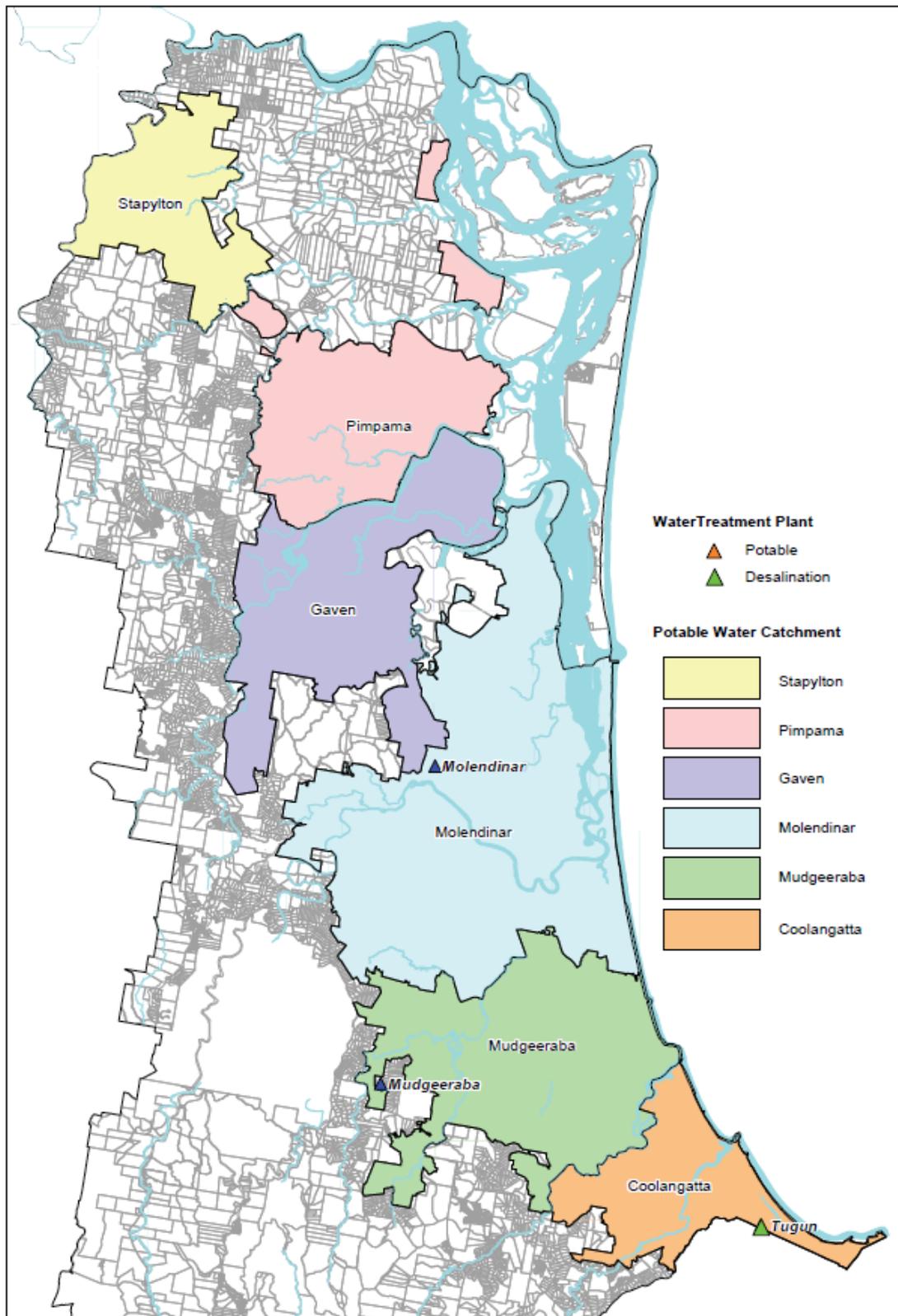
	<i>Total</i>
Population	524,583
Residential Water Connections	221,234
Non-residential water connections	16,433
Water reservoirs	65
Water supply network (km)	3,092
Sewerage network (km)	3,143
Sewage treatment plants	4

Source: GCCC (2013), GCW (2013a).

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<sup>9</sup> GCW (2013a).

**Figure 1 Gold Coast drinking water catchments**



Note: Water treatment plants owned by Seqwater. Source: GCW (2013a).

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## 2 PRICES AND BILLS

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### 2.1 Scope of review

Under the Ministerial Direction, the QCA must monitor the change in prices of distribution and retail water and sewerage services for residential and non-residential customers.

The change in residential bills is also monitored, as this shows the net impact of changes in all the components of the residential bill. The residential bill is a focus as the SEQ entities derive the majority of their revenues from residential customers.

As noted in chapter 1, there are some differences to our previous reviews. These derive from changes in the Direction and consultation with stakeholders to clarify our reporting.

For price monitoring in 2013-15, there is no legislated CPI cap which requires separate reporting for capped and non-capped services.<sup>10</sup>

The comparison of Gold Coast Water's average price (based on its revenues) with the QCA's full cost recovery average price (based on its MAR) is reported in chapter 7, as this contains the comparison of entity revenues and the QCA's MAR. Both of these comparisons inform our finding of whether there is an exercise of monopoly power (chapter 7).

### 2.2 Changes in prices

#### Change in prices in 2013-14

On 26 March 2013, Gold Coast City Council announced its intention to increase the prices of distribution and retail water and sewerage services by CPI, based on the March 2012 to March 2013 CPI to be announced in mid-April. Gold Coast City Council also noted that the State Government bulk water price was under review and stated that once it was advised of the bulk water price increase and the CPI figure, the budget would be adjusted accordingly. Further, that it proposed to keep the tariff structure in place, but this would be looked at over the coming year.

On 21 June 2013, Gold Coast City Council delivered its budget, noting a 2.1% increase in the prices of distribution and retail water and sewerage services and an 11% increase in the State bulk water charge.

The QCA can confirm that Gold Coast Water's prices increased by 2.1% in 2013-14, as noted in **Appendix B**.<sup>11</sup> While a legislated CPI cap no longer applies, CPI provides a broad benchmark against which changes in prices can be compared. The QCA's review of the prudence and efficiency of underlying costs is detailed further below.

A detailed assessment of the level and structure of Gold Coast Water's prices is beyond the scope of this review, which primarily focuses on a comparison of revenues and costs (the MAR).

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<sup>10</sup> In 2011-12 and 2012-13, a CPI price cap was applied to retail and distribution water and sewerage prices for specified customers, under the DR Act. The specified customers include residential and small business customers and any other customer who passed on charges to either of those groups. The March to March Brisbane All Groups CPI for the preceding year was used, so in 2011-12 the CPI cap was 3.6% and in 2012-13 the CPI cap was 1.3%. The CPI cap no longer applies.

<sup>11</sup> The March to March Brisbane All Groups CPI for the preceding year.

The QCA has commenced a separate investigation of pricing principles.<sup>12</sup> The pricing principles investigation will involve the release of Position Papers for consultation and is to be finalised in September 2014.

As noted above, the 2.1% price increase in 2013-14 excludes the impact of bulk water prices and government subsidies or rebates. The overall or net impact on customers requires consideration of all changes which affect their bill (see below).

### Change in prices in 2014-15

As part of price monitoring for 2013-15, the QCA requested information on 2014-15 prices.

However, Gold Coast Water has not published prices for 2014-15. In its 2013-15 price monitoring submission, Gold Coast Water provided a target revenue forecast for 2014-15 on an organisation-wide basis rather than a revenue forecast based on individual prices. Gold Coast Water stated it is reviewing its tariff structures with the intention to implement reform in 2014-15, and this review will involve:

- (a) price modelling, including the simulation of water accounts based on different tariff structures
- (b) market research using modelling techniques to determine customers' attitude towards tariff reform, their preferred tariff options and any changes that this might have to their water use behaviour
- (c) simplifying tariffs where possible to promote efficiency consistent with the National Water Initiative pricing principles.

In addition to the tariff review, Gold Coast Water is considering a trade waste study which will consider the future role prices play to provide the right incentives to drive the best outcomes to trade waste management.

As Gold Coast Water has not published its prices for 2014-15, the QCA cannot monitor the changes in the residential and non-residential prices in that year.

The QCA has used GCW's forecast revenue for 2014-15 for the other aspects of its review (chapter 7).

## 2.3 Residential bills

Customers should be clearly notified of the likely increase in bills by their retail water provider. The increase in each component of the bill and the overall increase to be faced by customers should be notified, with any updates being provided in a consistent and timely manner.

In budget documents delivered on 21 June 2013, Gold Coast City Council released information on the increase in average residential bills, which indicated that the retail and distribution component would increase by 2.1% and the bulk water component would increase by 11%.<sup>13</sup>

The Gold Coast Water price monitoring submission for 2013-15 identifies the net impact on bills of the 2.1% increase in the retail component and the 11% increase in the bulk component for:

- (a) low water users (100kl per year), an increase in the total bill of 3.7%
- (b) average users (180kl per year), an increase in the total bill of 4.5%

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<sup>12</sup> More information is available from the QCA's website: <http://www.qca.org.au/water/SEQLTRGPP/>

<sup>13</sup> 2013/14 summary of Total Rates and Charges @ 10.0% discount

(c) high users (300kl per year), an increase in the total bill of 5.3%.

Higher usage results in a greater increase in the total bill, due to bulk water prices increasing at a faster rate than other components of the bill.

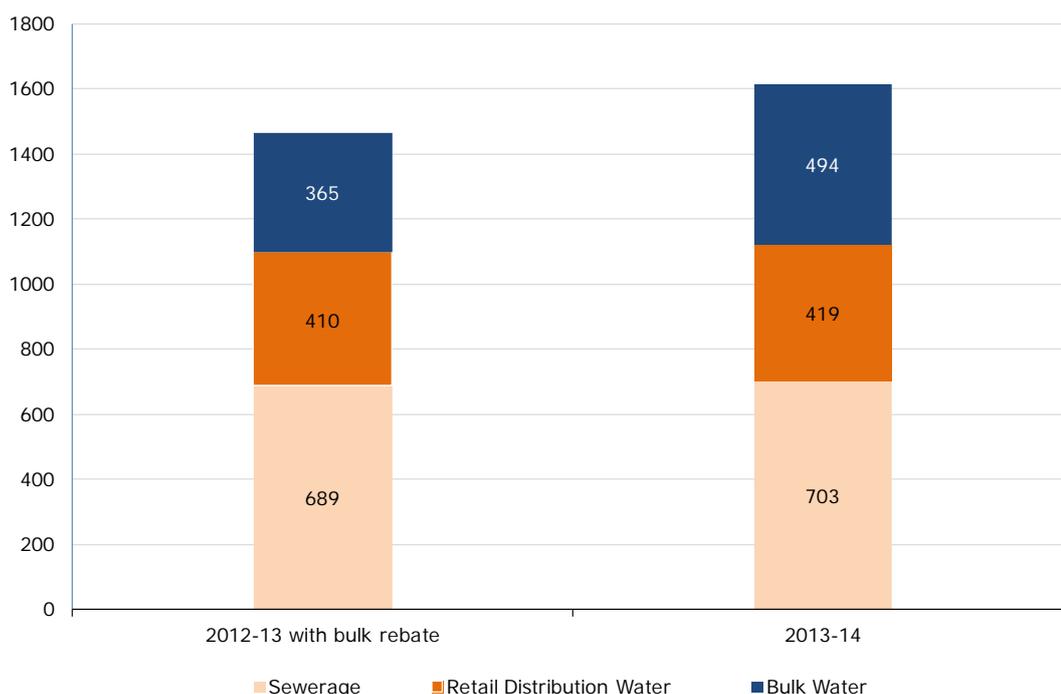
The QCA notes that residential bills will increase by more than indicated by Gold Coast Water (see **Appendix C**), predominantly due to the removal of the State Government bulk water rebate. For example, the QCA estimates that residential bills for a household using 200kl of water a year will increase by 10.4%.

The State Government provided a one-off \$80 bulk water rebate to residential customers in 2012-13.<sup>14</sup> This rebate no longer applies. A small component of the higher increase calculated by the QCA is due to differences in annual water use. Gold Coast Water adopts average use of 180kl; QCA adopts standard use of 200kl (NWC 2010).

The QCA recommends that retail water providers provide their customers with comprehensive information that identifies the increase in each component of the bill and the overall (net) increase, with any updates being provided in a consistent and timely manner.

As noted above, the Gold Coast Water has not released its prices for 2014-15, so the QCA cannot report on the changes in prices and residential bills in 2014-15.

**Figure 2 Residential bills (\$ per year)**



*Note: Assumes 200kl of water per year. The bulk water rebate was a one-off \$80 deduction to the residential bill in 2013. See Appendix C for detailed data.*

<sup>14</sup> Queensland Government Bulk Water Rebate: <http://www.dews.qld.gov.au/policies-initiatives/water-sector-reform/queensland-government-bulk-water-rebate>.

## 2.4 Other bills

In its submission, the Queensland Council of Social Service (QCOSS 2013) noted that the QCA fact sheets released in previous reviews have improved the transparency and understanding of the impact of prices on water bills. QCOSS recommended that price monitoring for 2013-15 could be expanded to show the impact of prices on different levels of usage and household type.

As noted above, for price monitoring purposes, the QCA has continued to compare standard bills for residential customers, as this allows for a focus on key price differences across SEQ and as 200kl is the standard usage adopted for national performance reporting purposes. The QCA does not have information on the distribution of levels of usage across household types, as that is contained in detailed billing data that is not collected under price monitoring.

However, it is recognised that customers may benefit from more information, if appropriately packaged and targeted. The QCA therefore recommends that, going forward, Gold Coast Water should consult with QCOSS and other stakeholders (including through its customer and community reference group as noted below) about the release of information about bill increases for different levels of usage and customer type.

## 2.5 Hardship and stakeholder engagement

QCOSS (2013) also recommended that price monitoring for 2013-15 should monitor the entities' policies in relation to hardship and stakeholder engagement. Further (and possibly separate to price monitoring) QCOSS recommended the QCA could be tasked to collect and publish statistics on incidence and trends in hardship, complaints and disconnections (as it currently does for electricity).

Gold Coast Water advised that while Allconnex had a hardship policy, upon reversion to Gold Coast City Council this policy was not adopted, as it was considered council's rate recovery policies and processes would provide appropriate coverage. Council's rate recovery policy is currently under review, with the expectation of a new policy by 30 June 2014. Gold Coast Water noted that it had information on its website about payment plans and a policy on deferral of rates. Where this does not suffice, customers can apply for special consideration of a proposed repayment plan which is subject to assessment.

In relation to stakeholder engagement, as noted above, Gold Coast Water stated that its tariff review will involve customer consultation to gain an understanding of customers' attitude towards tariff reform, their preferred tariff options, and any changes that this might have to their water use behaviour.

The QCA is developing best practice guidelines on customer engagement as part of its review of the long term framework for economic regulation. Performance reporting is also part of that review. The Department of Energy and Water Supply (DEWS) is undertaking a review of the Water and Sewerage Services Code for Small Customers in South East Queensland and will consider the water businesses' current policies (including hardship) in relation to supporting customers.

## 3 DEMAND

### 3.1 Introduction

The cost of providing water and sewerage services is affected by the quality and the quantity of the services provided. For the purposes of the current review, the QCA has accepted the current standards of service.

Estimates of demand for water and sewerage have a direct impact on the prudence and efficiency of operating and capital expenditure on water and sewerage activities, as well as on the prices paid.

### 3.2 Water

#### Forecasting methodology

Gold Coast Water forecast residential and non-residential water volumes for 2013-15 by multiplying the number of connections by consumption per connection measured as kilolitres per connection per annum (kl/c/a).

#### Connections

Gold Coast Water forecast residential water connections for 2013-15 by applying a growth rate to connections sourced from its billing system.

Gold Coast Water submitted that based on its billing system, over a five-year period, residential connection growth has averaged 1.02% per annum, with growth over the last two years at 1.07% for 2011-12, and 0.7% for 2012-13. On this basis, Gold Coast Water applied a growth rate of 0.7% per annum for residential connections for 2013-14 and 2014-15.

The QCA notes that this growth rate is lower than that forecast by the OESR (2.0%). Since its 2011-12 review, the QCA has adopted the OESR's low growth series, as OESR provides the State's official population forecasts and had advised low growth in the short term.

The QCA accepts that a departure from official growth forecasts may be justified where more recent data indicates previous estimates were incorrect or there is a structural change so that previous forecasts are no longer relevant. As Gold Coast Water has demonstrated that its lower growth rate is based on more recent data, the QCA accepts Gold Coast Water's connections forecast.

**Table 2: Gold Coast Water's forecast water connections**

	2012-13	2013-14		2014-15	
		Growth	#	Growth	#
Residential	221,234	0.7%	222,705	0.7%	224,264
Non-residential	16,433	1.4%	16,662	0.7%	16,778
<b>Total</b>	<b>237,667</b>		<b>293,367</b>		<b>241,042</b>

Source: GCW (2013b), QCA calculations.

## Consumption per connection

Gold Coast Water's base average consumption is the result of dividing total consumption in 2012-13 by the number of connections. Gold Coast Water data indicated that over the period 2010-11 to 2012-13 consumption per residential connection has increased by around 3% per annum from 161.4kL/a in 2010-11 to 171.6kL/a in 2012-13. For the 2013-15 review, Gold Coast Water assumed a 2% increase per annum for residential customers. For non-residential customers, Gold Coast Water assumed a lower growth rate of 1.3% for 2013-14.

Gold Coast Water submitted that it had previously estimated the price elasticity of water demand at 0.14%. Gold Coast Water submitted that this estimate is considered to be at the higher range of Sydney Water's price elasticity estimates. Gold Coast Water noted that when it applied this estimate to the proportion of discretionary water demand [which it estimated to be around 20% of total residential water demand based on Gold Coast End Use studies], the impact is immaterial. Therefore, Gold Coast Water has not directly incorporated price elasticity into its estimate of average consumption.

**Table 3: Gold Coast Water's forecast water volume**

	2012-13	2013-14		2014-15	
		Growth	#	Growth	#
Average consumption (kl/c/a)					
Residential	173.74	2.0%	177.28	1.0%	179.05
Non-residential	688.29	1.3%	697.27	2.0%	711.24
Water Demand (kL)					
Residential	38,437,794	2.7%	39,480,996	1.7%	40,154,950
Non-residential	11,310,666	2.7%	11,617,843	2.7%	11,933,151
<b>Commercially negotiated</b>	<b>300,000</b>	<b>0%</b>	<b>300,000</b>	<b>0%</b>	<b>300,000</b>
<b>Total</b>	<b>50,048,460</b>	<b>2.7%</b>	<b>51,398,839</b>	<b>1.9%</b>	<b>52,388,100</b>

Source: GCW (2013b).

In the 2012-13 review, SKM predicted that rebound from low demand caused by the Millennium Drought and mandatory water restrictions will occur over a four to five year period and settle at around the 200 litres per person per day (l/p/d) voluntary target for SEQ residential sector as a whole. The QCA accepted SKM's approach.

Recent data highlights that SEQ residents have continued to maintain water consumption below the residential water use voluntary target of 200 l/p/d (Target 200). In 2011-12, average daily residential water use in SEQ residential sector was 185 l/p/d (QWC 2012).

As a result, the 'most likely' demand scenario in the SEQ Water Strategy Annual Report 2012 (QWC 2012) assumed that average consumption will rebound over the five years from 2012 to 185 l/p/d for SEQ residential sector as a whole.

To arrive at the base [2012-13] residential average consumption, the QCA used Gold Coast Water's total residential volume, total residential connections and an assumption on occupancy rate. The QCA then estimated average residential consumption for each entity by assuming a rebound to a whole-of-SEQ residential sector forecast of 185 l/p/d in 2016-17. This is consistent

with the approach applied by the QCA across all SEQ retail and distribution water entities to estimate average consumption.

Following this approach, the QCA's estimate of average consumption per connection is 174 l/p/d in 2013-14 and 175 l/p/d in 2014-15. This is slightly below that forecast by Gold Coast Water. The QCA applied its average consumption to Gold Coast Water's estimate of connections and occupancy rate to arrive at water demand.

In relation to non-residential demand, in previous reviews, the QCA noted that the impact of restrictions on non-residential sector's demand largely resulted in investments in water saving technology or fittings rather than reductions in discretionary water use but accepted that some rebound can be expected for the non-residential sector. The QCA accepted Gold Coast Water's assumption that average non-residential consumption will grow at the same rate as average residential consumption. Therefore, the QCA has applied a 0.3% growth assumption in average consumption to arrive at non-residential demand.

The QCA's estimate of water demand is provided below.

**Table 4: QCA water volume forecast**

	2012-13	2013-14		2014-15	
		Growth	#	Growth	#
Average Consumption (kl/c/a)					
Residential	173.74	0.3%	174.26	0.3%	174.79
Non-residential	688.29	0.3%	690.17	0.3%	692.05
Average Consumption (l/p/d)					
Residential	208.3	0.3%	208.8	0.3%	209.4
Occupancy Rate					
Residential	2.29	-0.2%	2.28	-0.2%	2.28
Connected Population					
Residential	505,682	0.5%	508,122	0.5%	510,749
Water Demand (kL)					
Residential	38,437,794	0.8%	38,728,484	0.8%	39,034,859
Non-residential	11,310,666	1.7%	11,499,546	1.0%	11,611,171
Commercially negotiated	300,000	0.0%	300,000	0.0%	300,000
<b>Total</b>	<b>50,048,460</b>	<b>1.0%</b>	<b>50,528,031</b>	<b>0.8%</b>	<b>50,946,030</b>

Source: QCA calculations.

### Non-revenue water (losses)

Gold Coast Water submitted that, based on historical data, it estimated non-revenue water to be 9.7% in 2013-14 and 9.5% in 2014-15.

The QCA notes that this is slightly lower than that of QUU and Unitywater's loss factors. The cost-effective reduction of losses is an objective for all water entities. The QCA therefore

accepts Gold Coast Water's proposed loss factor and has applied it to estimate non-revenue water.

**Table 5: Non-revenue water**

	2012-13	2013-14		2014-15	
		GCW	QCA	GCW	QCA
Loss %					
Total	12.0%	10.74%	10.74%	9.50%	9.50%
Non-revenue Water (kL)					
Total	5,983,230	5,521,250	5,427,708	5,499,300	4,839,873

Source: GCW supporting information (2013), QCA calculations.

### Bulk water forecasts

Bulk water demand forecasts are the sum of residential, non-residential and non-revenue water. The QCA's forecasts of bulk water are 1.7% lower than Gold Coast Water's in 2013-14 and 3.6% lower in 2014-15, arising from the QCA's lower growth in average residential and non-residential consumption. The QCA's forecasts of bulk water are lower than in 2012-13, due to declining occupancy rates and loss factors.

**Table 6: Bulk water forecasts (ML)**

	2012-13	2013-14		2014-15	
		GCW	QCA	GCW	QCA
Total <sup>(1)</sup>	56,032	56,920	55,956	57,887	55,786

Note: (1) includes 300 ML of commercially negotiated demand. Source: GCW (2013b), GCW supporting information (2013), QCA calculations.

## 3.3 Sewerage

### Connections

As for water, Gold Coast Water applied a growth rate of 0.7% per annum for residential and non-residential connections.

As for water, the Authority accepts Gold Coast Water's proposed growth rate, as this is based on more recent data.

**Table 7: Residential and non-residential wastewater connections**

		2013-14		2014-15	
		Growth	#	Growth	#
Residential	208,717	0.7%	210,178	0.7%	211,649
Non-residential	14,785	0.7%	14,888	0.7%	14,992
<b>Total</b>	<b>223,502</b>		<b>225,066</b>		<b>226,641</b>

Source: GCW (2013b), QCA calculations.

### Non-residential volume

Gold Coast Water submitted that forecasts for non-residential volumes were calculated using billed potable consumption data divided by industry and the application of discharge factors. Gold Coast Water submitted that all non-residential customers are offered a free allowance of 185kl per annum.

The QCA notes that since the forecast of sewage volume is based on billed potable consumption, the QCA has revised Gold Coast Water's sewage volume forecasts to correspond with the QCA's forecast non-residential water volume growth.

**Table 8: Sewage volume forecast**

2012-13	2013-14				2014-15			
	GCW		QCA		GCW		QCA	
	Growth	ML	Growth	ML	Growth	ML	Growth	ML
6,560.3	2.7%	6,738.3	1.7%	6,669.9	2.7%	6,921.2	1.0%	6,734.6

Source: GCW (2013b).

### 3.4 Trade waste

Gold Coast Water applies charges based on trade waste loads, which are determined using customer sampling and established industry average data. Gold Coast Water's forecast is based on projecting forward the trend of historical loads.

Gold Coast Water submitted that it is currently undertaking a comprehensive review of its trade waste management system based on the Water Services Association of Australia (WSAA) guidelines. These guidelines outline how sewage service providers can manage trade waste in line with best practice and includes an assessment of trade waste discharges, asset management processes, and technical and economic instruments.

The QCA notes that trade waste forms 0.1% of Gold Coast Water's total revenue, being a non-core activity of Gold Coast Water. Based on the QCA's review of Gold Coast Water's supporting information, the QCA accepts Gold Coast Water's forecast of trade waste connections and volumes.

**Table 9: Trade waste volume forecasts**

	2012-13	2013-14		2014-15	
		Growth	#	Growth	#
Tonnes					
Pollutant type					
Chemical oxygen demand	108.9	2.7%	111.8	2.6%	114.7
Non-volatile suspended solids	24.5	2.4%	25.1	2.8%	25.8
Phosphorous	4.0	2.5%	4.1	2.4%	4.2

Source: GCW (2013b).

## 3.5 Demand for capital planning

### Gold Coast Water's submission

Gold Coast Water uses Gold Coast City Council's Infrastructure Demand Model (IDM) to predict future water demand and sewage discharges, which were based on current town planning information and predicted population and employment figures. The IDM is updated whenever new information is available and it can calculate future demand up to 2061. Although a complete update of planning documents such as the PIP is only undertaken every few years, amendments to planning assumptions and capital works programs are based on available data.

Gold Coast Water submitted that when forecasting the amount of water demand, it considered a range of population growth figures along with different rates of water demand. The lower bound for water consumption is considered to be the most likely future water demand for the Gold Coast Water, based on the current usage of the city. The low bound is based on total (residential and non-residential) urban demand that gradually increases from a current level of 278 l/p/d to 315 l/p/d, to allow for rebound in water use after the drought.

Gold Coast Water's capital planning standard employs the parameters set out in the SEQ Water Supply and Sewerage Design and Construction Code (Design and Construction Code).

### QCA's analysis

The QCA notes that Gold Coast Water's demand for capital planning reflects the Design and Construction Code which came into effect on 1 July 2013. Comments on capital planning policies and procedures are also included in chapter 4.

## 3.6 Summary

Given available information, Gold Coast Water's methodology to forecast demand for 2013-15 is reasonable. Nevertheless, the QCA has made some adjustments to reflect its view of lower average consumption. The QCA's estimates broadly confirm Gold Coast Water's estimates, although the differences increase in 2014-15. For example, the QCA's bulk water estimate in 2013-14 is 1.7% lower than Gold Coast Water's, the difference increases to 3.6% in 2014-15.

The QCA also notes that Gold Coast Water has investigated the likely impact of price elasticity in its estimate of average consumption.

## 4 CAPITAL COSTS

### 4.1 Introduction

The costs of providing water and sewerage activities include bulk, distribution and retail costs. Distribution and retail costs include capital costs (see below) and operating costs (chapter 5).

Capital costs are the costs of infrastructure and other assets used to deliver services. A key input is the Regulatory Asset Base (RAB). The Ministerial Direction sets out the principles for rolling forward the RAB over time.

Capital costs comprise depreciation (return of capital) and an allowance for the cost of debt and a return for the risks involved (return on capital). Consistent with the Direction, the QCA uses straight-line depreciation and a benchmark WACC of 6.57%.

### 4.2 Regulatory Asset Base

Under the Ministerial Direction, the QCA must roll forward the RAB for each individual council based on their agreed disaggregation of the total Allconnex RAB as at 1 July 2010 and subsequent capital expenditure incurred to 1 July 2013.

### 4.3 Regulatory Asset Base at 1 July 2010

Gold Coast City Council's RAB as at 1 July 2010 is shown in Table 10 below.

**Table 10 Gold Coast City Council RAB as at 1 July 2010 (\$m)**

<i>Council</i>	<i>Water</i>	<i>Sewerage</i>	<i>RAB</i>
Gold Coast	946.14	1,565.73	2,511.87

*Source: GCW (2013b).*

The QCA has not been able to identify an agreed disaggregation of the asset base as at 1 July 2010 by individual council. The QCA notes however that in response to a request from Allconnex in June 2012, the QCA provided estimates by district, product and asset class. The QCA has therefore established its MAR on this basis.

Gold Coast Water has submitted a RAB value as at 1 July 2010 that reflects the QCA's advice of June 2012.

### 4.4 Capital expenditure in 2010-13

Under previous Ministerial Directions, the QCA reviewed the prudence and efficiency of Allconnex's forecast capital expenditure for the Gold Coast in 2010-11 and 2011-12. Gold Coast Water was not subject to price monitoring in 2012-13.

Capital expenditure in the Gold Coast area for 2010-13 is shown in Table 11 below.

**Table 11 Gold Coast capital expenditure 2010-13 (\$m)**

<i>Council</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Gold Coast	138.15	106.58	124.61

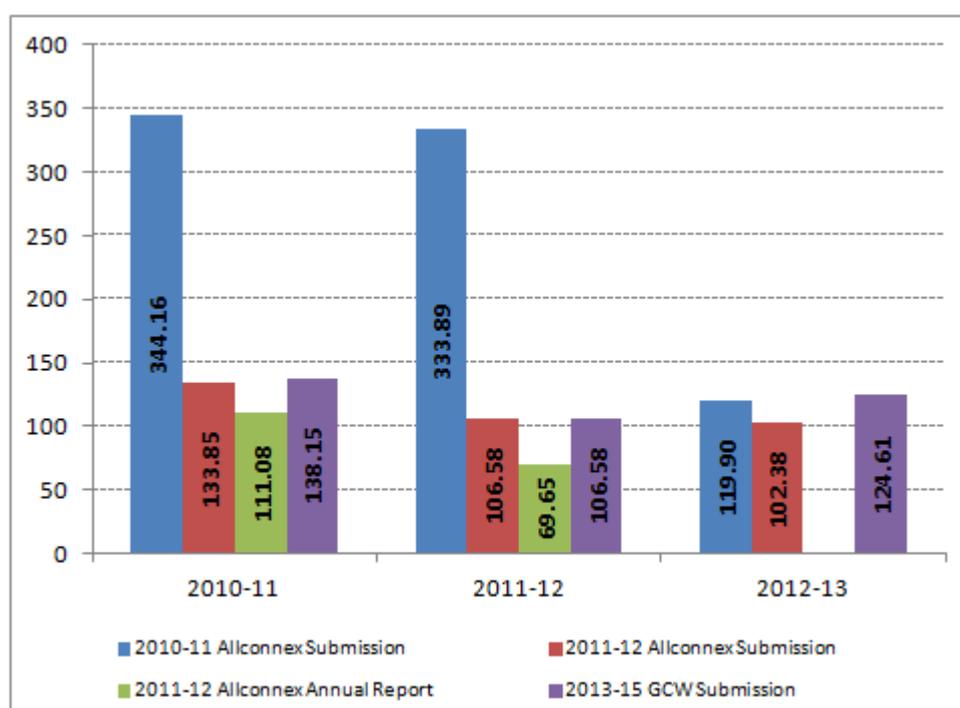
*Note: Includes contributed, donated and gifted assets. Source: GCW (2013b).*

For this review, Gold Coast Water has adopted the forecast capital expenditure data for 2010-12 in Allconnex's most recent data template to the QCA.

The QCA considers that capital expenditure for 2010-12 should be based on the audited actual capital expenditure in the Allconnex Annual Report for July 2011 - September 2012 (Allconnex 2012). As the disaggregated actual data underpinning the Allconnex Annual Report was not available, the QCA has disaggregated actual data on the basis of the disaggregation of forecasts in Allconnex's most recent data template to the QCA.

Changes in capital expenditure forecasts for the Gold Coast district since 2010-11 are shown in Figure 3 below. The actual capital expenditure in 2010-12 for the Gold Coast district in the Allconnex Annual Report is less than the values submitted by Gold Coast Water. The QCA's 2010-13 capital expenditure is therefore lower than submitted by Gold Coast Water, leading to a lower RAB value as at 1 July 2013.

**Figure 3 Capital expenditure estimates (\$m)**



Source: Allconnex (2010), Allconnex (2011), Allconnex (2012), GCW (2013b).

## 4.5 Capital expenditure in 2013-15

### Ministerial Direction

The Ministerial Direction for 2013-15 price monitoring requires the QCA to assess capital expenditure for 2013-15 based on:

- a view of the prudence and efficiency of capital expenditure, focussing on any areas of significant cost increase and identifying the reasons why
- the existence of robust policies and procedures having regard to good industry practice, as well as compliance, using a sample of six capital expenditure projects
- the robustness of the capital expenditure program planning and delivery processes and procedures in an overall sense and identify any areas for improvement.

The Ministerial Direction requires the QCA to review the prudence and efficiency of capital expenditure not more than once during the 2013-15 monitoring period. Only expenditure found to be prudent and efficient can be included in the RAB.

### Gold Coast Water's forecast capital expenditure for 2013-15

Gold Coast Water's forecast capital expenditure for water and sewerage, and by driver, are in Table 12 and Table 13.

**Table 12 Gold Coast Water capital expenditure 2013 to 2015 by service (\$m)**

<i>Service</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
<b>Water</b>	27.23	19.69	46.91
<b>Sewerage</b>	52.46	32.30	84.76
<b>Total</b>	<b>79.68</b>	<b>51.99</b>	<b>131.67</b>

*Note: Includes contributed, donated and gifted assets. Source: GCW (2013b).*

**Table 13 Gold Coast Water forecast capital expenditure 2013 to 2015 by driver (\$m)**

<i>Driver</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Growth	20.87	11.06	31.92
Renewal	22.86	19.43	42.29
Improvement	6.79	0.81	7.60
Compliance	9.17	0.69	9.85
Contributed Assets	20.00	20.00	40.00
<b>Total</b>	<b>79.68</b>	<b>51.99</b>	<b>131.67</b>

*Source: GCW (2013b).*

Gold Coast Water submitted that the combination of low growth and improved planning resulted in the 2013-14 capital works program being its lowest level in several years.

### QCA's approach

The QCA has considered the prudence and efficiency of Gold Coast Water's forecast capital expenditure for 2013-15 in accordance with the Ministerial Direction.

The QCA's assessment focuses on:

- (a) a detailed review of the prudence and efficiency of a sample of six capital expenditure projects and their compliance with capital policies and procedures
- (b) a review of the robustness of capital policies and procedures relating to planning and delivery having regard to good industry practice.

The QCA appointed SKM to assist in its assessment. The terms of reference for SKM's review were consistent with the Direction and circulated to entities prior to the commencement of the review. SKM provided a copy of its draft report to the entities for comment and their responses were taken into account in SKM's final report.

SKM's final report is a detailed review of the sampled projects and capital policies and procedures and is available on the QCA's website. Key issues from the SKM review that underpin the QCA's findings are summarised below.

### Prudency and efficiency criteria

The criteria and processes for determining the prudency and efficiency of capital expenditure projects are defined in the Information Requirements for 2013-15. In summary, to establish:

- (a) prudency, an entity must demonstrate that there is a need for the expenditure, typically by reference to an analysis of its driver/s (that is, growth, renewal, improvement and compliance)
- (b) efficiency, information is required on the scope and standard of the works and the corresponding cost and timing of works. This should be linked, where relevant, to the underlying cost components such as unit rates, on-costs and contingencies and supporting materials such as consultant reports. Information is also required on expenditure approval policies and procedures.

The QCA requires capital expenditure to be included in the RAB only when it is commissioned, and contributes productive capacity to the system. SKM reviewed the compliance of the sampled projects against Gold Coast City Council's/Gold Coast Water's policies and procedures and SKM's view of good industry practice for the development of capital projects, including project prioritisation, a defined review and approvals process, and appropriate documentation.

### Sample selection

The Ministerial Direction required a sample of six capital expenditure projects be selected for detailed review. The sample chosen by the QCA reflected the largest six projects/programs (by dollar value) to be commissioned in 2013-15, excluding those that had been reviewed previously by the QCA and found to be prudent and efficient.<sup>15</sup> Projects commissioned in 2013-15 were selected given their impact on the MAR for these years.

The six projects/programs selected were:

- (a) Wastewater Mains Renewal Program
- (b) RM & GM for Burleigh Waters PS B47
- (c) Wastewater Pump Station Mechanical / Electrical Upgrade Program
- (d) Water Main Renewal Program
- (e) Sewage Treatment Plant Civil Upgrade Program
- (f) OX26 Pump Station.

The sample of Gold Coast Water projects reviewed in detail is shown in Table 14 below. Gold Coast Water's sample accounted for 43.8% of its commissioned capital expenditure for 2013-15.

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<sup>15</sup> The Gold Coast portion of Allconnex's Meter Renewals Program was reviewed by the QCA in 2011-12 and found to be prudent and efficient (QCA 2012a). Accordingly, the QCA excluded the Water Meter Replacement Program (\$4.20m in 2013-15) from the sample. The QCA also excluded the Sandy Creek Sewer External project (\$5.47m in 2014-15) from the sample due to SKM's inability to assess the project, owing to a conflict of interest.

Gold Coast Water added the as-incurred capital expenditure for projects over multiple years of work in progress to form the commissioned value. Thus, Gold Coast Water's commissioned values are equal to the sum of the as-incurred values. This is addressed further below.

**Table 14 Gold Coast Water capital expenditure projects reviewed (\$m)**

<i>Project</i>	<i>Driver</i>	<i>Commissioned in 2013-15</i>	<i>As Incurred in 2013-15</i>
1. Wastewater Mains Renewal Program	Renewal	10.42	10.42
2. Rising Main & Gravity Main for Burleigh Waters PS B47	Growth / Compliance / Improvement <sup>16</sup>	8.14	8.14
3. Wastewater Pump Station Mechanical / Electrical Upgrade Program	Renewal	6.26	6.26
4. Water Main Renewal Program	Renewal	5.66	5.66
5. Sewage Treatment Plant (STP) Civil Upgrade Program	Compliance	5.63	5.63
6. OX26 Pump Station	Growth	4.07	4.07
<b>Total sampled expenditure</b>		<b>40.19</b>	<b>40.19</b>
<b>Total capital expenditure (excluding contributed assets)</b>		<b>91.67</b>	<b>91.67</b>

*Note: Table may not add due to rounding. The QCA notes GCW's commissioned values are equal to as-incurred values. Source: GCW supporting information (September 2013).*

The wastewater mains renewal, wastewater pump station mechanical / electrical upgrade, water main, and STP civil upgrade programs each contain a number of specific projects which will be commissioned in 2013-15. For its capital expenditure review, SKM reviewed the highest dollar value project in each of these four programs. The selected projects were:

- (a) Western Force Wastewater Main Replacement on Falconer Street (Wastewater Mains Renewal Program)
- (b) Sewer Pump Station Mechanical Electrical Minor Works 2013-14 (Wastewater Pump Station Mechanical / Electrical Upgrade Program)
- (c) Water Main Replacement 2013-14 (Water Main Renewal Program)
- (d) Coombabah WWTP Process Tanks Refurbishment (STP Civil Upgrade Program).

## 4.6 Prudency and efficiency of sampled projects

### 4.6.1 Wastewater Mains Renewal Program

#### Background

The project selected for review was the Western Force Wastewater Main Replacement on Falconer Street.

<sup>16</sup> Each driver is weighted 33% (GCW supporting information (2013)).

The Western Force Main (WFM) was constructed in 1989 to facilitate pressurised sewage conveyance in the catchments of Benowa, Surfers Paradise, Main Beach, Southport, Arundel, Labrador, Molendinar, Bundall and Ernest. The WFM delivers sewerage to the Coombabah STP.

In January 2012, an Allconnex report noted the main had several failures in the preceding five to six years that had the potential of damaging the environment and breaching guidelines of the environmental regulator (the then Department of Environment and Resource Management (DERM)).<sup>17</sup> These failures occurred around Gas Release Valves (GRV) due to degradation of lining/steel possibly due to malfunctioning of GRVs.

In September and December 2011, two similar failures occurred at Falconer Street, Southport. Subsequent investigations revealed that the section of the main (approximately 86 metres) immediately upstream of GRV where the recent repairs were carried out, and two sections of main totalling approximately 232 metres at the second GRV at the upstream end of Falconer Street, were in a very poor condition and required rehabilitation.

SKM reviewed the replacement of the 86 metre (stage 1 of the project) and 232 metre (stage 2) mains. Due to the urgency to replace the 86 metre long section, stage 1 was completed by Allconnex in May 2012.

Gold Coast Water submitted that the expenditure incurred on the project would be \$1.17 million in 2013-14. A further \$1.06 million was incurred from 2011-12 to 2012-13.

#### Prudency

Gold Coast Water identified renewal as the driver of the project. SKM considered renewal to be appropriate for this project given the number of failures and issues experienced with the main.

SKM was satisfied that (for stage 2) an appropriate options evaluation process has been undertaken and the scope of work was appropriate for the purpose described.

SKM found the project to be prudent.

#### Efficiency

SKM concluded that the project costs for stage 2 were in line with market conditions given the competitive tendering process adopted and were therefore efficient. SKM noted that the costs for stage 1 were above market rates; however, as the works were undertaken in emergency conditions, SKM considered that the costs were reasonable.

The replacement of the sections of rising main should mitigate the risk of further failures and repair costs. These costs have not been quantified by Gold Coast Water.

SKM found the project to be efficient.

#### Policies and procedures

SKM noted that a business case for the project was not provided by Gold Coast Water. Gold Coast Water's policies and procedures require a project brief, business case and project delivery/implementation plan. Gold Coast Water advised that, as the program is a 'like for like' renewals project, the Asset Management Plan (AMP; refer to section 4.9 below for further details) provides justification for these types of renewals programs; hence a business case is not required. Gold Coast Water advised that a project brief is completed to identify the specific projects to be undertaken in the specific year.

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<sup>17</sup> GCW supporting information (2013): Allconnex report of January 2012.

## Conclusion

On the basis of SKM's advice, the QCA accepts that the project is prudent and efficient, as reflected in Table 15 below.

**Table 15 Western Force Wastewater Main Replacement on Falconer Street (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	1.06	1.17	0.00	2.23
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	1.06	1.17	0.00	2.23

*Note: Capital expenditure as-incurred. Source: SKM (2013b).*

### 4.6.2 Rising Main & Gravity Main for Burleigh Waters PS B47

#### Background

The QCA included the Burleigh Wastewater Pumping Station B47 Rising Main (RM) and Gravity Main (GM) Upgrade project in its 2011-12 review of Allconnex's capital expenditure. The project was part of an overall scheme previously adopted by Gold Coast Water to rationalise the Elanora and Merrimac sewerage catchments to reduce flows to the Elanora STP.<sup>18</sup>

The Elanora STP treats sewerage from the southern Gold Coast (from Coolangatta to Mermaid Beach). The plant has reached its capacity and requires augmentation to operate under existing conditions and accommodate predicted growth. In 2010-11, the Elanora STP reported a number of exceedances to the environmental regulator (then DERM).<sup>19</sup>

In July 2011, Allconnex's internal review of the project found it to be prudent and efficient. This was based on design costs of \$90,000 in 2010-11, and detailed design and construction costs of \$7.60 million across 2011-12 and 2012-13 (refer to section 4.9 for more information on Allconnex's application of prudence and efficiency principles to capital planning). Subsequently, capital expenditure of \$7.60 million was found by the QCA to be prudent and efficient (QCA 2012a).

The project was not completed by Allconnex and \$4.60 million is included in Gold Coast Water's capital expenditure plan for 2013-14. Due to the delay in completing the project, and the increase in the overall budget to \$8.14 million, the QCA included the project in the sample for the current review.

A detailed sewerage master plan for the Merrimac East catchment planned for the diversion of northern Elanora catchment to the Merrimac East catchment as a cost effective way to manage growth in both catchments. The proposed diversion was planned in two stages. The first of these diversions (to divert flows from the B47 catchment) is required now, and the second is due in 2021.

This project will involve the construction of 1.5km of rising/gravity main along Christine Avenue through to the connection point at shaft 22/1, where a steep section of gravity sewer will connect the main to the Bermuda Street Tunnel. Modifications to pump station B47 will also be undertaken. The flow to be diverted from the B47 catchment to Merrimac STP is of the order of 5 ML/day.

<sup>18</sup> GCW supporting information (2013): Allconnex report of July 2011.

<sup>19</sup> GCW supporting information (2013).

Gold Coast Water submitted that the expenditure incurred on the project would be \$4.60 million in 2013-14. A further \$3.54 million was incurred from 2010-11 to 2012-13.

### Prudency

Gold Coast Water nominated growth, improvement and compliance as equal drivers of this project. SKM considered the drivers were appropriate for this project given the anticipated growth in the catchment and the historic licence non-compliances. SKM concluded that an appropriate options evaluation process has been undertaken and the scope of work was appropriate.

SKM considered the project was prudent.

### Efficiency

SKM identified significant difficulties in the co-ordination of the project's tender process by Gold Coast City Council's Central Procurement Office (CPO). In particular, Gold Coast Water's recommendation that a conforming tender (for \$5.92 million) be accepted by the council's Governance Administration and Finance (GAF) committee was rejected in favour of a lower cost alternative tender (for \$5.58 million) preferred by CPO. Although the two tenders were from the same supplier, the conforming tender was for open trenching and the alternative tender was for micro-tunnelling.<sup>20</sup>

The decision to proceed with the alternative tender option has resulted in difficulties during the delivery of the project, including higher design and construction costs. However, SKM was satisfied that the overall cost of the project is similar to that which would have been incurred had the conforming tender been accepted as design changes would have been required as variations to the conforming tender.

SKM concluded that the lack of appropriate processes between the CPO and Gold Coast Water resulted in inefficiencies in the project. SKM recommended a reduction in project costs of \$42,000; this represents the difference between the contract cost for the conforming and alternative (accepted) tenders.

### Policies and Procedures

SKM observed that systems had subsequently been put in place to manage the processes and communication between Gold Cast Water and the CPO.

SKM found that the project complied with appropriate policies and procedures.

### Conclusion

Table 16 below shows the expenditure profile for the project.

**Table 16 Rising Main & Gravity Main for Burleigh Waters PS B47 (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	3.54	4.60	0.00	8.14
SKM Adjustment	0.00	-0.04	0.00	-0.04
QCA Recommended	0.00	4.56	0.00	8.10

*Note: Capital expenditure as-incurred. Source: SKM (2013b).*

<sup>20</sup> GCCC supporting information (2013).

### 4.6.3 Wastewater Pump Station Mechanical / Electrical Upgrade Program

#### Background

The project selected for review was the Sewer Pump Station Mechanical Electrical Minor Works 2013-14. The 2013-14 program includes the replacement of 92 pumps in 52 minor pump stations.

The project involves the replacement and refurbishment of minor mechanical and electrical equipment at sewerage pump stations due to condition, age and obsolescence. These items are critical to pump station operation. Gold Coast Water considers that, in most circumstances, it is not appropriate to run equipment to failure; a proactive approach to replacing equipment based on age, performance, condition, implications of risk of failure and maintenance history is appropriate.

Gold Coast Water's sewerage pump stations are built in accordance with various regulator and in-house standards and requirements. The project will allow STPs to meet environmental licence (regulated now by the Department of Environment and Heritage Protection (DEHP)), and health and safety requirements. Service potential will also be increased due to creation of a younger and potentially more reliable asset base.<sup>21</sup>

Gold Coast Water submitted that the expenditure incurred on the program would be \$0.85 million in 2013-14 and \$0.95 million in 2014-15<sup>22</sup>.

#### Prudence

Gold Coast Water nominated renewal as the main project driver, with improvement and compliance secondary drivers.

SKM considered the drivers were appropriate for this project as the mechanical and electrical components have reached the end of their useful life and failure to replace could result in licence non-compliances. SKM also found the process used for the identification and prioritisation of works to be completed was appropriate. As such, SKM concluded that the project is prudent.

#### Efficiency

SKM found that the standards used for this project were appropriate.

SKM considered the delivery method adopted appropriate for the scope of work. However, in light of council's advice that it did not purchase pumps as a bulk order, SKM stated that investigation should be undertaken into the potential cost savings associated with the bulk purchase of required pumps, the use of a limited range of standard sized pumps and the costs associated with storage and inventory to determine if efficiency gains can be made.

SKM considered the use of quotes and tenders and unit rates from recent similar projects is an appropriate process and that the estimated costs for the 2013-14 and 2014-15 programs to be appropriate and in line with market conditions.

SKM found the project to be efficient.

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<sup>21</sup> GCCC supporting information (2013).

<sup>22</sup> The 2014-15 program includes the replacement of 7 pumps in 4 major pump stations and the replacement of 84 pumps in 42 minor pump stations.

### Policies and procedures

SKM found no evidence of a documented implementation strategy or a toll gate or gateway process. Gold Coast Water's policies and procedures require a project brief, business case and project delivery / implementation plan. Gold Coast Water advised that, as the program is a 'like for like' renewals project, the AMP (refer to section 4.9 below for further details) provides justification for these types of renewals programs; hence a business case is not required. Gold Coast Water advised that a project brief is completed to identify the specific projects to be undertaken in the specific year.

### Conclusion

Table 17 below shows the expenditure profile for the project.

**Table 17 Sewer Pump Station Mechanical Electrical Minor Works 2013-14 (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	0.00	0.85	0.95	1.80
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	0.00	0.85	0.95	1.80

*Note: Capital expenditure as-incurred. Source: SKM (2013b).*

## 4.6.4 Water Main Renewal Program

### Background

The project selected for review was the Water Main Replacement 2013-14.

The water supply reticulation network consists of over 3000km of water pipes, part of which is over 60 years old. Despite the relatively young age of the water network within the Gold Coast, there are water mains that experience frequent failures or are at risk of failure. If these water mains are not replaced, the number of unplanned interruptions will increase, resulting in a decrease in service quality and increased water loss. The water main replacement program, which has been underway for the last five years, has been formulated to address the issue.

The water main renewal program is developed by application of the following method:

- (a) a prioritised list of renewals based on a history of failures causing water interruptions and water loss
- (b) a risk based desktop analysis of water mains
- (c) water mains that are constructed of asbestos cement and are located near a canal or waterway.

The 2013-14 program includes 25 new sub-projects and five sub-projects carried over from 2012-13. Five sub-projects from the 2013-14 scope have been put on hold due to budget limitations (requires an additional \$370,000 to complete all sub projects).

Gold Coast Water submitted that the expenditure incurred on the project would be \$2.50 million in 2013-14.

### Prudency

Gold Coast Water nominated renewal as the project driver. SKM considered the renewal driver was appropriate as failure to replace the mains could result in service interruptions and income loss.

SKM stated that the process used for the identification and prioritisation of works was appropriate. However, SKM noted that no evidence of the implementation of the process for the selection and prioritisation of water main replacement projects had been provided. Hence, it could not comment on Gold Coast Water's compliance with this method in its planning and implementation of the works.

SKM concluded the project was prudent.

### Efficiency

In September 2011, Allconnex released an invitation to tender for the design and construction of water reticulation main replacements across the Gold Coast, Logan and Redland districts. The three shortlisted tenderers were each considered capable of completing the works; Allconnex selected National Tapping Services Pty Ltd (NTS) based on cost.<sup>23</sup> The duration of the contract was one year but included the option for three further one-year extensions.

SKM compared unit rates used by Gold Coast Water with the NTS contract and Logan Water's Water Reticulation Main Replacement program<sup>24</sup> (Table 18).

**Table 18 Comparison of water main renewals unit rates**

<i>Pipe diameter (mm)</i>	<i>Unit Rate (\$/metre)</i>		
	<i>Gold Coast</i>	<i>Logan</i>	<i>NTS</i>
50	506	N/A	N/A
100	506	350 to 400 <sup>(a)</sup>	N/A
150	598	450	275 (385) to 398 (557) <sup>(b)</sup>
225	690	N/A	NA

*Note: (a) If pipe length is less than 300 metres, cost is \$400 / metre; if pipe length is greater than 300 metres, cost is \$350 / metre. (b) Price dependent on situation in which the work is to be undertaken and the length of the pipe; the value in brackets indicates the cost for mains less than 50 metres long. Source: SKM (2013b).*

SKM developed a cost estimate for Gold Coast Water's program of works for 2013-14 based on the unit rates used by Logan and the maximum unit rates submitted by NTS (as the conditions in which the works are to be undertaken were unknown to SKM) (Table 19).

**Table 19 Comparison of water main renewals cost estimates**

<i>Unit rate source</i>	<i>Direct cost (\$m)</i>	<i>Difference from Gold Coast</i>	
		<i>Value (\$m)</i>	<i>Percentage (%)</i>
Gold Coast	2.292		
NTS	1.845	-0.447	-19.5
Logan	1.806	-0.485	-21.2

*Source: SKM (2013b).*

<sup>23</sup> NTS was also the incumbent contractor for Gold Coast's water main replacement program, having satisfactorily completed the full contract scope in 2009-10 and 2010-11 (GCW supporting information (2013): Allconnex report of November 2011).

<sup>24</sup> Refer to QCA 2014 LW, section 4.6.3.

In terms of Gold Coast Water's unit rates being substantially higher than the NTS rates, SKM accepted the explanation from Gold Coast Water that the NTS rates did not include all direct and overhead costs; they were used to 'build' the replacement cost.

However, SKM considered the unit rates used by Gold Coast Water were high and not in line with their current contract rates or those used by Logan Water. As such, SKM did not consider that the costs for the program were consistent with prevailing market conditions and recommended a reduction in costs of 8% of the program costs (\$200,000) from \$2.50 million to \$2.30 million. The QCA accepts this recommendation.

#### Policies and Procedures

SKM noted that a business case for the project was not provided by Gold Coast Water. Gold Coast Water's policies and procedures require a project brief, business case and project delivery/implementation plan. Gold Coast Water advised that, as the program is a 'like for like' renewals project, the AMP (refer to section 4.9 below for further details) provides justification for these types of renewals programs; hence a business case is not required. Gold Coast Water advised that a project brief is completed to identify the specific projects to be undertaken in the specific year.

#### Conclusion

Table 20 below shows the expenditure profile for the Water Main Replacement Program 2013-14.

**Table 20 Water Main Replacement 2013-14 (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	N/A	2.50	0.00	2.50
SKM Adjustment	N/A	-0.20	0.00	-0.20
QCA Recommended	N/A	2.30	0.00	2.30

*Note: Capital expenditure as-incurred. Source: SKM (2013b).*

### 4.6.5 STP Civil Upgrade Program

#### Background

The project selected for review was the Coombabah STP Process Tanks Refurbishment.

The Coombabah STP was constructed in stages commencing in 1980. The plant includes aeration tanks and clarifiers as well as a range of smaller tanks and pump stations. A program of refurbishment of the process tanks has been running at Coombabah STP for several years. The scope generally includes:

- (a) taking tanks offline
- (b) internal inspection to determine a detailed scope of works
- (c) concrete repairs where necessary
- (d) painting and replacement of metalwork.

The aim of the project is to keep all treatment tanks at the Coombabah STP in an operational condition and to ensure that the plant is able, at all times, to meet environmental licence obligations.

The works were previously intended (by Allconnex) to be completed in the 2011-12 financial year. However, variations to the scope resulted in an extension to the delivery of the project. The project is expected to be completed in the 2013-14 financial year.

Gold Coast Water submitted that the expenditure incurred on the project would be \$0.80 million in 2013-14. A further \$2.05 million was incurred from 2010-11 to 2012-13.

### Prudency

Gold Coast Water identified compliance and renewal as the primary cost drivers for this project, with improvement as a secondary driver.

SKM found the project to be prudent as the drivers were demonstrated as the assets have reached the end of their useful life and, without refurbishment, the plant's capacity will be reduced, leading to failure to meet licence conditions. Further, SKM considered that the standards used for this project were appropriate.<sup>25</sup>

### Efficiency

SKM noted that, whilst there have been a number of change request and variations on the project, the costs have not exceeded the original budget. SKM considered that the project costs were in line with market conditions and therefore efficient.

### Policies and Procedures

SKM noted that a business case for the project was not provided by Gold Coast Water. Gold Coast Water's policies and procedures require a project brief, business case and project delivery/implementation plan. Gold Coast Water advised that, as the program is a 'like for like' renewals project, the AMP (refer to section 4.9 below for further details) provides justification for these types of renewals programs; hence a business case is not required.

### Conclusion

Table 21 below shows the expenditure profile for this program.

**Table 21 Coombabah STP Process Tanks Refurbishment (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	2.05	0.80	0.00	2.85
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	2.05	0.80	0.00	2.85

*Note: Capital expenditure as-incurred. Source: SKM (2013b).*

## 4.6.6 OX26 Pump Station

### Background

The OX26 Pump Station is located adjacent to the intersection of Kopps Road and Michigan Drive in Oxenford, near the Movieworld theme park. The station was constructed in 1995 to service the development areas of, and surrounding, Pacific Pines. OX26 was constructed as a temporary lift station only, pending construction of a larger permanent pumping facility when required to meet catchment growth. OX26 experiences frequent spills during wet weather

<sup>25</sup> The standards were outlined in Allconnex's project initiation form of March 2011.

events, and occasionally during dry weather, draining to Saltwater Creek, which is unacceptable to the public and Movieworld.<sup>26</sup>

Development and augmentation of OX26 was identified in Gold Coast City Council's Priority Infrastructure Plan (2006); rapid development of this area has accelerated the need for this augmentation as soon as possible.<sup>27</sup>

Potential consequences of not upgrading OX26 include:

- (a) increasing frequency of spills at the pump station
- (b) continued risk to public health and discomfort to neighbouring properties from odour issues
- (c) spills to waterways and larger fines from DEHP as a result of non-compliance with sewer discharge obligations.

The project involves the construction of a new pump station (OX45), the decommissioning of two existing pump stations (OX26 and OX3) and associated changes to the network.

Gold Coast Water submitted that the expenditure incurred on the project would be \$1.60 million in 2013-14. A further \$2.47 million was incurred from 2010-11 to 2012-13.

#### Prudency

Gold Coast Water identified growth as the primary driver for this project, with renewals and compliance as secondary drivers. SKM considered these drivers to be appropriate for the project and that an appropriate options evaluation process has been undertaken and the scope of work is appropriate.

SKM also noted that DEHP had accepted Gold Coast Water's strategy to meet environmental licence requirements to demonstrate compliance with Gold Coast Water's Desired Standards of Service.<sup>28</sup>

SKM determined that the project is prudent.

#### Efficiency

SKM considered that an appropriate tendering process had been used for the award of the construction phase of the project.

SKM also considered that the standards used for the project were appropriate and that, based on the tender process for the construction component of the project, costs were in line with market conditions.

SKM found the project to be efficient.

#### Policies and Procedures

SKM considered that the project complied with the appropriate policies and procedures.

#### Conclusion

Table 22 below shows the expenditure profile for the OX26 Pump Station.

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<sup>26</sup> GCW supporting information (2013).

<sup>27</sup> GCW supporting information (2013).

<sup>28</sup> The GCW Desired Standards of Service were replaced by the Design and Construction Code on 1 July 2013 (GCCC 2013).

**Table 22 OX26 Pump Station (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Gold Coast Proposed	2.47	1.60	0.00	4.07
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	2.47	1.60	0.00	4.07

Note: Capital expenditure as-incurred. Source: SKM (2013b).

#### 4.7 Adjustments to sampled projects

On the basis of SKM's detailed review of six sampled projects, the QCA has reduced 2013-15 expenditure in respect of two projects, as per Table 23 below. The overall reduction is \$0.24 million or 1.1% of the sampled projects. As the sampled projects represent a sub-set of the sampled expenditure outlined in Table 14 above, this is a 0.6% reduction to sampled expenditure.

**Table 23 Review of Capital Expenditure for 2013-15 (\$m)**

<i>Project</i>	<i>SKM Assessment</i>			<i>Expenditure*</i>		
	<i>Prudent</i>	<i>Efficient</i>	<i>Comment</i>	<i>GCW</i>	<i>SKM</i>	<i>QCA</i>
1. Western Force Wastewater Main Replacement on Falconer Street [Wastewater Mains Renewal Program]	Yes	Yes	Prudent and efficient.	2.23	0.00	2.23
2. Rising Main & Gravity Main for Burleigh Waters PS B47	Yes	No	Prudent and partially efficient. Reduction to reflect inefficiencies caused by governance processes.	8.14	-0.04	8.10
3. Sewer Pump Station Mechanical Electrical Minor Works 2013-14 [Wastewater Pump Station Mechanical / Electrical Upgrade Program]	Yes	Yes	Prudent and efficient.	1.80	0.00	1.80
4. Water Main Replacement 2013-14 [Water Main Renewal Program]	Yes	No	Prudent and partially efficient. Reduction to reflect lower unit rates.	2.50	-0.20	2.30
5. Coombabah STP Process Tanks Refurbishment [STP Civil Upgrade Program]	Yes	Yes	Prudent and efficient.	2.85	0.00	2.85
6. OX26 Pump Station	Yes	Yes	Prudent and efficient.	4.07	0.00	4.07
<b>Total</b>				<b>21.60</b>	<b>-0.24</b>	<b>21.35</b>

\* Includes expenditure on projects incurred before 1 July 2013. Source: SKM (2013b). Table may not add due to rounding.

To translate the as-incurred adjustments of Gold Coast Water's capital projects into as-commissioned adjustments, the QCA relied on Gold Coast Water's data template. However, the template added the as-incurred costs over the life of multi-year projects to calculate as-commissioned costs for capital projects. Given the overall reduction was only \$0.24 million, the QCA does not consider this issue to have had a material impact on Gold Coast Water's MAR.

#### 4.8 Capitalised interest

Gold Coast Water did not capitalise interest for works in progress from 1 July 2012. As noted above, Gold Coast Water's incurred capital expenditure is added over the life of the project to form capital expenditure as-commissioned.

The QCA recommends that Gold Coast Water capitalise interest over the life of work in progress at the WACC to calculate the as-commissioned value. This is consistent with normal regulatory practice (for example, see QCA 2005 and ACG 2004).

#### 4.9 Policies and procedures

##### Capital expenditure planning from 2010 to 2012

In the 2010-11 and 2011-12 reviews, the QCA reported on Allconnex's approach to capital planning. Table 24 below summarises the QCA's key findings from these reports.

**Table 24 Allconnex's capital planning - 2010 to 2012**

<i>Year</i>	<i>QCA's capital planning findings</i>
2010-11	<p>Allconnex advised that its initial submission was premised on a consolidation of its participating councils' capital expenditure forecasts for 2010-11 (totalling \$485.4m). Subsequently, Allconnex undertook a comprehensive review of the capital program based on prudence and efficiency principles and deferred or removed approximately \$168m in capital expenditure for 2010-11 (bringing total capital expenditure to \$314.9m after a QCA adjustment of \$2.5m was applied).</p> <p>The \$168m saving was part of a \$500m capital expenditure saving identified by Allconnex for its first five years of [planned] operation.</p> <p>In its draft report, the QCA made a number of recommendations for project selection and prioritisation across the three council districts; in particular, the QCA encouraged Allconnex to take into account a regional perspective when developing future capital works programs. Allconnex supported the QCA's recommendations on its capital planning process.</p>
2011-12	<p>Allconnex submitted that actual capital expenditure for 2010-11 was \$217.5m. Allconnex identified the re-scoping of two major projects as having a significant impact on its original 2010-11 capital expenditure estimates: (a) the Stapylton STP construction was deferred, saving \$60m over five years; and (b) the Merrimac West Wastewater Upgrade was found to cost \$126m more than an alternative pump station option.</p> <p>Allconnex noted that: (a) around 70% of its planned capital expenditure over the next three years was growth related, including significant future development at the Gold Coast; and (b) the timing of these developments and supporting infrastructure would play a significant part in infrastructure planning.</p> <p>Allconnex forecasted its 2011-12 capital expenditure to be \$182.97m, a decrease of \$344.53m on the forecast of \$527.50m provided in 2010-11.</p> <p>Allconnex also provided an update on improvements to its capital planning processes.</p>

Source: QCA (2011), QCA (2012a).

##### Capital expenditure planning from 2013 to 2015

The assessment of capital expenditure during the price monitoring period also takes into account the robustness of the capital expenditure program planning and delivery processes and

procedures in an overall sense, and identifying any areas for improvement. This review is conducted with respect to good industry practice.

SKM reviewed whether Gold Coast Water's policies and procedures reflect good industry practice, drawing on the following criteria:

- (a) a standardised approach to cost estimating including whether a summary document had been prepared to facilitate review and reporting
- (b) a gateway review process
- (c) detailed analysis of options for major projects
- (d) only commissioned capital expenditure is included in the RAB
- (e) compliance with legislation and corporate plans
- (f) consideration of efficiency from a regional perspectives
- (g) whether the asset management system is consistent with Publicly Available Specification 55 - Asset Management (PAS-55)<sup>29</sup> or similar
- (h) procurement and other delivery processes.

SKM's review is summarised below.

#### Standardised approach to cost estimating

The document 'QP-2243 Project planning assumptions' (part of the 'Gold Coast Water QP-22 Templates' (Templates)) outlines a standardised approach to cost estimating which is consistent with good industry practice, and was considered by SKM to be robust.

#### Gateway review

The 'Capex Program – GCW Project Planning and Delivery Governance' flowchart, 'GCW's 2013-14 Capital Program & Operational Budget Guidelines', the 'QP-22 Project Management Methodology' (project management methodology) and the 'Lifecycle for major and standard capital projects' document describe project phasing and a series of decision gates for planning and development of the budget.

Examples provided in the Templates set out the requirements for the information required for each decision gate. SKM concluded the gated review process used was consistent with good industry practice and was robust.

'QP-2211 Post Implementation Review Report' in the Templates outlines a benefits realisation assessment which complies with good industry practice and is robust.

In the project management methodology, two groups of management staff - the Business Review Committee and the Program Review Group - are assigned responsibilities. This was not considered by SKM to be good industry practice. Below council/board level, only individuals should be assigned responsibilities, although these individuals may convene an appropriate committee to assist them with their responsibilities.

#### Detailed analysis of options for major projects

Stage 2 of a project's development is described as 'Concept planning - option assessment feasibility' and the project management methodology briefly describes its requirements. 'QP-

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<sup>29</sup> PAS-55 is published by the British Standards Institution.

2205 Project options analysis', and 'QP-2242 MCA assessment tool - project theme and criteria weightings' in the Templates meet the requirements of good industry practice and were robust.

#### Only includes commissioned capital expenditure from 1 July 2010 in the RAB

SKM required information relating to 2010-13 expenditure and the year completed and commissioned to make a determination as to whether the RAB only includes commissioned capital expenditure from 1 July 2010.

As noted above, the QCA has adopted data from the Allconnex Annual Report to populate capital expenditure on an as-commissioned basis from 2010-12. From 1 July 2012, Gold Coast Water has provided capital expenditure on an as-commissioned basis, however work in progress was added over the life of multi-year projects and was not capitalised at the WACC.

#### Compliance

SKM's review of key Gold Coast City Council and Gold Coast Water documents governing major capital expenditure is shown below.

**Table 25 Gold Coast Water compliance with legislation**

<i>Document</i>	<i>SKM Assessment</i>
City of Gold Coast Annual Plan 2013-14 (June 2013)	Legislation referenced: the DR Act, <i>Environmental Protection Act 1994</i> (Qld) and the <i>Sustainable Planning Act 2009</i> (Qld).
Gold Coast City Council Corporate Plan 2009-14	No industry-specific legislation referenced.
City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Part A (July 2013)	Legislation referenced: the DR Act, <i>Environmental Protection Act 1994</i> (Qld) and the <i>Sustainable Planning Act 2009</i> (Qld).
City of Gold Coast Water and Sewerage Network Services Plan (Netserv Plan) Part B (July 2013)	Legislation referenced: the DR Act.
Capital Program & Operational Budget Guidelines Gold Coast Water 2013-14 Version 1	No industry-specific legislation referenced.
Gold Coast City Council 2013-14 Planning and Budget Preparation Guidelines (December 2012)	Legislation referenced: the DR Act and the <i>Plumbing and Drainage Act 2002</i> (Qld).
QP-22 Project Management Methodology draft Rev. 4 (July 2013)	No industry-specific legislation referenced. Section 5.21 refers to 'QP-2246 - Regulatory and Other Approvals' as "a mandatory checklist to ensure that all potential approvals required by regulatory and other agencies are identified". <sup>30</sup>
QP-2246 - Regulatory and Other Approvals in the Templates	This document lists some permitting, liaison and consultation requirements but does not appear to be a comprehensive checklist for all regulatory requirements for the water industry.

Source: SKM (2013b).

<sup>30</sup> The required approvals listed in QP-2246 cover a range of state, local government, and government owned corporation regulatory obligations/requirements.

As Gold Coast Water did not demonstrate a comprehensive list or checklist for meeting relevant legislation, SKM considered its capital expenditure policies and procedures did not meet the legislative compliance requirement. SKM did report however that, in July 2013, Gold Coast Water commenced a project to develop a compliance register to meet the requirements of AS3806-2006<sup>31</sup>. The compliance register will include legislative and other obligations that relate specifically to Gold Coast Water and is due for completion by 28 February 2014.<sup>32</sup> The QCA supports Gold Coast Water's initiative to implement a compliance program which meets the Australian standard.

The QCA notes that Gold Coast Water's Annual Performance Plan (APP) for 2013-14 lists a number of pieces of legislation under which Gold Coast Water carries out its responsibilities. Gold Coast Water's Annual Operations Report (AOR) for 2012-13 highlighted the unit's compliance with directions given to it by Gold Coast City Council under the LGA. For example, Gold Coast Water prepared a Water Netserv Plan for approval from the council before submission to the Minister for State Development, Infrastructure and Planning. The council's Water Netserv Plan Part A was endorsed by the Minister in 2012-13.

#### Considers regional perspective

SKM noted that the DR Act requires SEQ service providers to prepare Water Netserv Plans by 1 March 2014.<sup>33</sup> An entity's Water Netserv Plan must indicate how the entity plans to achieve effective outcomes for the provision of water and sewerage services in the entity's area and the SEQ region.

Further, the Bulk Water Supply Code (DEWS 2013a) also includes provisions for co-ordinated water system planning between the bulk and distribution sectors in SEQ to achieve infrastructure planning (including water quality improvements) on a best value for money basis.

As an example of adopting a regional perspective, Gold Coast Water advised that it had participated in the Review of Stapylton Sewerage Servicing Strategy. Following the disestablishment of Allconnex, Beenleigh STP is under the control of Logan City Council; consequently there is a need to manage the sewerage system across water entity boundaries. The study presents an assessment - based on financial, environmental and social considerations - of strategic options for the transportation and treatment of sewage from the Stapylton catchment.<sup>34</sup>

Gold Coast Water also participates in a number of regional committees and forums, including:

- (a) SEQ Healthy Waterways, which includes special working groups
- (b) Total water cycle management working group
- (c) Water quality offsets SEQ reference group
- (d) Participant of the councillor/mayors forum addressing regional issues
- (e) SEQ Procurement Forum
- (f) SEQ Demand Management working group
- (g) SEQ Emergency Responsiveness Group

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<sup>31</sup> AS3806-2006: Compliance Programs.

<sup>32</sup> GCW supporting information (2013).

<sup>33</sup> Section 99BJ.

<sup>34</sup> GCW supporting information (2013).

- (h) SEQ CEO Partnering forum. Under this forum sits the Strategy and Planning Committee and Operational Committee that reports to the forum on a monthly basis.<sup>35</sup>

However, SKM found that none of the capital expenditure procedural documents reviewed (see Table 25 above) had explicit provisions to address regional requirements at key decision points. Accordingly, SKM concluded the capital expenditure process therefore does not comply with this requirement.

The QCA considers that the realisation of benefits due to a regional perspective should be captured and reported, to demonstrate regional efficiencies are being pursued and achieved.

#### Asset management system

Gold Coast Water's AMP, prepared to meet council's asset management planning obligations under the LGA<sup>36</sup>, includes three chapters: (i) Water Supply AMP; (ii) Sewerage AMP; and the (iii) Recycled Water AMP. Gold Coast Water's primary reference for its AMP is the International Infrastructure Management Manual (IIMM).<sup>37</sup> The IIMM provides Queensland councils with a basis for asset management planning including a road map for preparing an asset management plan (DLGP 2011).

SKM considered good industry practice for asset management is promoted by PAS-55.

Based on the documentation it reviewed, SKM reviewed Gold Coast Water's asset management system against PAS-55 and concluded that it was not in keeping with good industry practice and was not robust. SKM stated this may lead to inefficiencies in expenditure and implementation and, potentially, service standards non-compliance.<sup>38</sup>

Gold Coast Water indicated that, through the implementation of continuous improvement activities over the next few iterations of the AMPs (updated annually), it will progress its asset management planning practices from this 'core'/compliant level to leaders within the industry. As part of this process, Gold Coast Water will strive to achieve alignment with the ISO 55000 asset management standards.<sup>39</sup>

#### Procurement

The CPO in Gold Coast City Council undertakes all council procurement activities, including Gold Coast Water's, in accordance with requirements of the LGA and LGR.<sup>40</sup>

Gold Coast City Council has a Procurement Policy and Standards. The council has developed saving targets in relation to procurement and protocols to ensure value for money through applying strategic procurement techniques. SKM therefore concluded that the council's Procurement Policy and Standards were in accordance with good industry practice.

#### Planned improvements

Gold Coast Water identified two initiatives that were underway to improve its capital expenditure processes:

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<sup>35</sup> GCW supporting information (2013).

<sup>36</sup> Section 104(5)(a)(ii).

<sup>37</sup> The IIMM is published by the Institute of Public Works Engineering Australia (IPWEA).

<sup>38</sup> Refer to SKM (2013b) section 3.3.4 for further details.

<sup>39</sup> GCW supporting information (2013).

<sup>40</sup> GCW supporting information (2013): LGA, s 104(3); LGR, ss 225 and 228.

- (a) Gold Coast Water has engaged CH2MHILL to undertake a review to assess the efficiency and effectiveness of Gold Coast Water's capital planning and delivery framework with best practice and other water utilities.
- (b) Gold Coast Water currently utilises a number of systems to manage different areas of project management, including Project Office, SAP and MS Project Standard. Work is currently underway to develop, configure and implement MS Project Server as a new Project Management Information System which will be used by Gold Coast Water and other Directorates within Gold Coast City Council. Roll-out to Gold Coast Water is expected in February 2014.

The QCA supports Gold Coast Water's review of its capital planning and delivery framework.

### Summary of findings on policies and procedures

The QCA notes that SKM found that Gold Coast Water's capital planning policies and procedures were not always consistent with good industry practice but Gold Coast Water was generally aware of, and plans to address, these issues.

For example, SKM concluded that Gold Coast Water's asset management system was not robust but noted Gold Coast Water is developing a compliance program.

SKM did not quantify any savings arising from its review of policies and procedures. The QCA notes that this is typical of such reviews which do not readily lend themselves to quantification.

## 4.10 Summary of adjustments for 2013-15

The effects of the QCA adjustments to capital expenditure are shown below.

**Table 26 Gold Coast Water's and QCA's capital expenditure as-commissioned (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Gold Coast Water's proposed capital expenditure	79.68	51.99
QCA adjustments to sampled capital expenditure	-0.24	0.00
<b>Total capital expenditure</b>	<b>79.44</b>	<b>51.99</b>

Source: QCA calculations.

## 4.11 Contributed, Donated and Gifted Assets

Under the Ministerial Direction, the QCA must accept that, in setting prices entities may have applied a revenue offset approach to account for capital contributions received. This approach is to remain in effect until such time as the entity nominates, through their price monitoring returns, to adopt the asset offset method. Where a change in methodology is adopted, the RAB is not to be adjusted retrospectively.

Under legislation, a maximum charge applies for capital contributions (for water, sewerage, transport and public parks). For example, the cap for a three-bedroom dwelling is \$28,000 (DSDIP 2013). The maximum charge remains in place while a review of infrastructure planning and charging is underway by the Department of State Development, Infrastructure and Planning (DSDIP 2013).

Under the price monitoring framework, the QCA assesses whether the methodology adopted by the entities to forecast contributed assets and capital contributions is reasonable in the circumstances.

### Gold Coast Water's submission

Gold Coast Water has adopted the asset offset approach to capital contributions. Gold Coast Water noted developer contributions provide a funding source for infrastructure required for growth.

**Table 27 Gold Coast Water contributed assets and capital contributions (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Contributed Assets	19.73	18.80	15.31	20.00	20.00
Capital Contributions	30.89	28.50	21.01	20.00	20.00
<b>Total</b>	<b>50.61</b>	<b>47.30</b>	<b>36.32</b>	<b>40.00</b>	<b>40.00</b>

Source: GCW (2013b).

### QCA's analysis

The QCA accepts Gold Coast Water's forecasts of contributed assets and capital contributions from 2012-13, but has used the actual data for 2010-11 and 2011-12 from Allconnex's 2011-12 Annual Report rather than forecasts. As a result the QCA's estimate of contributed assets and capital contributions is \$3.7 million lower over the 2010-12 period.

**Table 28: Revised contributed assets and capital contributions (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Contributed Assets	19.73	18.20	15.31	20.00	20.00
Capital Contributions	31.36	24.89	21.01	20.00	20.00
<b>Total</b>	<b>51.09</b>	<b>43.09</b>	<b>36.32</b>	<b>40.00</b>	<b>40.00</b>

Source: Allconnex (2012), GCW (2013b).

## 4.12 Return on assets

The Ministerial Direction required the QCA to advise a benchmark WACC by 31 January 2013. The QCA is also required to monitor the WACCs applied by the entities against the benchmark WACC.

By 31 January 2013, the QCA advised a WACC benchmark of 6.57% (post-tax nominal) for 2013-15. The benchmark WACC and supporting information were also published on the QCA website. In doing so, the QCA noted that it had applied its (then) current methodology to calculate the benchmark WACC. Further, that the benchmark WACC is used to calculate the MAR in the QCA's price monitoring reports. However, the entities retain control over their actual WACC assumptions and prices during the monitoring period.

Gold Coast Water adopted the benchmark WACC of 6.57%.

To ensure that the total return on capital is equivalent to WACC, there needs to be an adjustment to avoid double-counting of inflationary gain. This is a standard adjustment made by the QCA under its nominal framework.<sup>41</sup> To estimate inflation, the Ministerial Direction

<sup>41</sup> This issue arises as the nominal WACC is applied to a nominal RAB and is explained on page 197 of the Dalrymple Bay Coast Terminal Draft Access Undertaking (QCA 2004).

requires the QCA to use the annual March to March ABS CPI (all groups, Brisbane). Both Gold Coast Water and the QCA have used the same estimates to index the RAB.<sup>42</sup>

Gold Coast Water's estimate of the return on capital resulting from the 6.57% WACC and its estimate of the RAB is compared with the QCA's estimate in the tables below. As the WACC and indexation rate is the same, the difference in return on capital estimates is due to the QCA's lower starting RAB, as noted above.

**Table 29 Return on capital (\$m)**

	<b>2013-14</b>				<b>2014-15</b>			
	<b>Water</b>		<b>Sewerage</b>		<b>Water</b>		<b>Sewerage</b>	
	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>
Gross return on capital	64.1	64.7	112.5	108.7	64.2	64.9	112.1	108.8
Less indexation	-24.4	-24.6	-42.8	-41.3	-24.4	-24.7	-42.7	-41.4
<b>Return on capital</b>	<b>39.7</b>	<b>40.1</b>	<b>69.7</b>	<b>67.3</b>	<b>39.8</b>	<b>40.2</b>	<b>69.5</b>	<b>67.4</b>

Source: GCW (2013b), QCA calculations.

#### 4.13 RAB roll forward

In accordance with the Ministerial Direction and normal regulatory practice, the initial RAB is rolled forward to account for capital expenditure, inflationary gain, depreciation (return of capital) and disposals. In calculating regulatory depreciation, the QCA is required to take into account the existing useful lives attaching to the individual assets or relevant asset classes.

##### Gold Coast Water's submission

As noted previously, Gold Coast Water used a starting RAB value as at 1 July 2010 consistent with the final Allconnex RAB as at 1 July 2010 as advised by the QCA. Capital expenditure data for 2010-12 reflected the most recent Allconnex data template provided to the QCA.

Gold Coast Water calculated depreciation for regulatory purposes using the straight-line method and using existing asset lives. The RAB value was grouped by region and asset class and depreciated using the average remaining asset life for each group. Depreciation was calculated based on the opening RAB plus the addition of 50% of each year's capital expenditure and indexation as per the Information Requirements for 2013-15.

<sup>42</sup> As per the Information Requirements for 2013-15, the indexation is 3.6% for 2010-11, 1.3% for 2011-12, 2.1% for 2012-13, and 2.5% for 2013-15.

**Table 30 Gold Coast Water asset base roll forward - water (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Opening RAB	946.1	967.0	968.1	969.4	973.1
Net additions	13.7	17.0	10.9	10.7	8.0
Indexation	34.3	12.7	20.4	24.4	24.4
Depreciation	27.1	28.6	30.1	31.4	30.3
<b>Closing RAB</b>	<b>967.0</b>	<b>968.1</b>	<b>969.4</b>	<b>973.1</b>	<b>975.2</b>

Source: GCW (2013b).

**Table 31 Gold Coast Water asset base roll forward - sewerage (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Opening RAB	1,565.7	1,639.0	1,637.3	1,703.5	1,702.7
Net additions	65.9	30.0	87.3	15.7	6.2
Indexation	57.6	21.5	35.3	42.8	42.6
Depreciation	50.2	53.1	56.4	59.3	56.7
<b>Closing RAB</b>	<b>1,639.0</b>	<b>1,637.3</b>	<b>1,703.5</b>	<b>1,702.7</b>	<b>1,694.9</b>

Source: GCW (2013b).

### QCA Analysis

As noted previously, the QCA considers that the starting RAB value as at 1 July 2010 should reflect the final Allconnex RAB as at 1 July 2010 as previously advised by the QCA. Capital expenditure data for 2010-12 should reflect actual data in the Allconnex Annual Report. The QCA has therefore adopted this position in its RAB roll-forward.

The QCA applied straight-line depreciation in 2013-15 and the same indexation as Gold Coast Water.

The QCA starting RAB for 2013-15 is higher than Gold Coast Water's for water assets and lower for sewerage assets. In total, the QCA's RAB is lower than Gold Coast Water's due to the QCA's use of lower capital expenditure for 2010-11 and 2011-12 from Allconnex's Annual Report.

**Table 32 QCA asset base roll forward - water (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Opening RAB	946.1	976.7	975.6	978.9	984.0
Capex	39.0	31.7	23.5	27.0	19.7
Indexation	34.5	12.8	20.6	24.6	24.7
Depreciation	-27.3	-28.6	-29.7	-31.0	-30.0
Disposals	-1.4	-2.5	0.0	0.0	0.0
Capital contributions	-14.3	-14.4	-11.2	-15.5	-15.5
<b>Closing RAB</b>	<b>976.7</b>	<b>975.6</b>	<b>978.9</b>	<b>984.0</b>	<b>982.8</b>

Source: QCA calculations.

**Table 33 QCA asset base roll forward - sewerage (\$m)**

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Opening RAB	1,565.7	1,606.3	1,581.8	1,638.8	1,651.1
Capex	72.1	38.0	102.3	52.4	32.3
Indexation	57.0	21.0	34.1	41.3	41.4
Depreciation	-50.1	-52.0	-54.3	-57.0	-54.4
Disposals	-1.6	-2.8	0.0	0.0	0.0
Capital contributions	-36.8	-28.7	-25.1	-24.5	-24.5
<b>Closing RAB</b>	<b>1,606.3</b>	<b>1,581.8</b>	<b>1,638.8</b>	<b>1,651.1</b>	<b>1,646.0</b>

Source: QCA calculations.

#### 4.14 Capital Costs

A comparison of Gold Coast Water and QCA capital costs is provided in the table below.

**Table 34 Comparison of Gold Coast and QCA Capital Costs (\$m)**

	<i>2013-14</i>				<i>2014-15</i>			
	<i>Water</i>		<i>Sewerage</i>		<i>Water</i>		<i>Sewerage</i>	
	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>	<b>GCW</b>	<b>QCA</b>
Gross return on capital	64.1	64.7	112.5	108.7	64.2	64.9	112.1	108.8
Indexation	-24.4	-24.6	-42.8	-41.3	-24.4	-24.7	-42.7	-41.4
<b>Net return on capital</b>	<b>39.7</b>	<b>40.1</b>	<b>69.7</b>	<b>67.3</b>	<b>39.8</b>	<b>40.2</b>	<b>69.5</b>	<b>67.4</b>
Return of capital	31.4	31.0	59.3	57.0	30.4	30.0	56.7	54.4
<b>Total capital costs</b>	<b>71.1</b>	<b>71.1</b>	<b>129.0</b>	<b>124.3</b>	<b>70.1</b>	<b>70.2</b>	<b>126.1</b>	<b>121.8</b>

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## 5 OPERATING COSTS

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Under the Ministerial Direction, the QCA is required to inform customers of the costs and other factors underlying water and sewerage services, including distinguishing between bulk and distribution/retail costs. Bulk water costs are treated as a pass-through item.

Further, the QCA is required to review the prudence and efficiency of Gold Coast Water's operating costs and its policies and procedures. The Ministerial Direction requires a focus on areas of significant cost increase, and specifically refers to the operating cost categories of materials and services, employees, corporate costs and electricity.

### 5.1 QCA's approach

The QCA considered the prudence and efficiency of Gold Coast Water's forecast operating costs for 2013-15 in accordance with the Ministerial Direction.

The QCA's assessment focussed on:

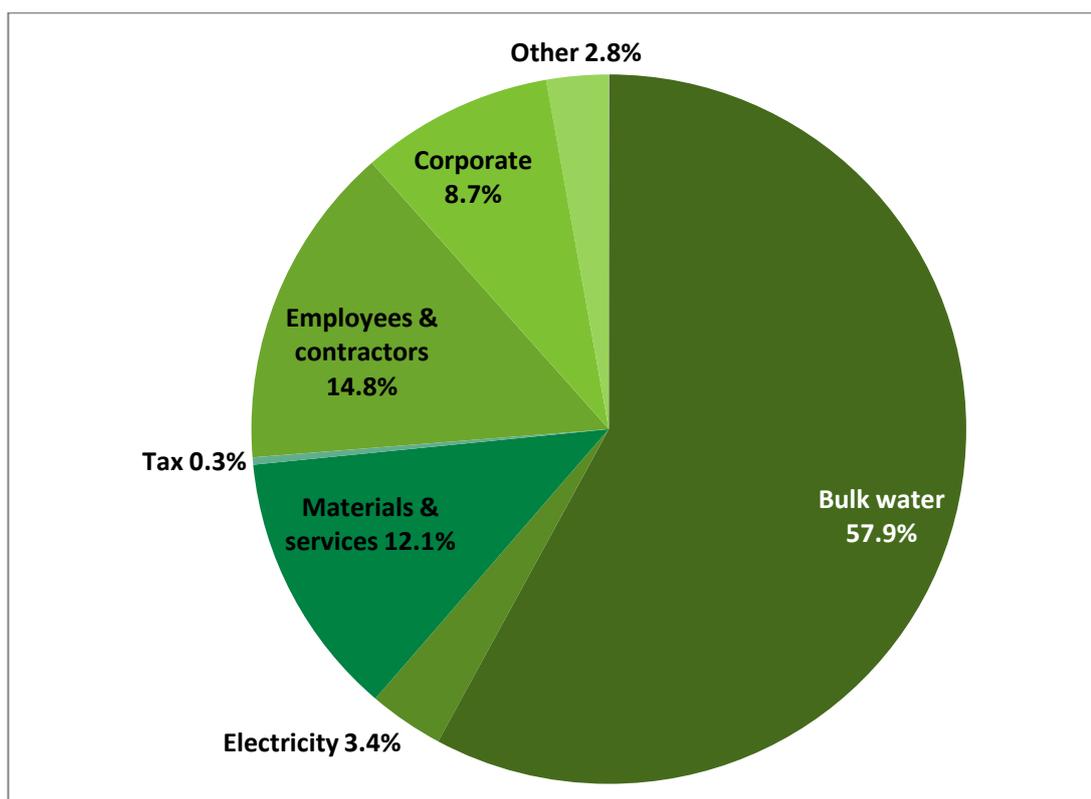
- (a) identifying the bulk and distribution/retail components of operating costs and the reasons for cost increases
- (b) high-level benchmarking of operating costs
- (c) a review of Gold Coast Water's policies and procedures against good industry practice
- (d) the treatment of bulk water costs as a pass-through item
- (e) the prudence and efficiency of materials and services, employees (and contractors), corporate costs and electricity.

The QCA appointed SKM to assist in its assessment of operating and capital expenditure. As noted in the previous chapter, the terms of reference for SKM's review were consistent with the Direction and circulated to entities prior to the commencement of the review. SKM provided a copy of its draft report to the entities for comment and their responses were taken into account in SKM's final report.

SKM's final report is a detailed review of the operating costs and policies and procedures and is available on the QCA's website. Key issues from the SKM review that underpin the QCA's findings are summarised below.

### 5.2 Total operating costs

Gold Coast Water submitted operating costs of \$248 million in 2013-14 and \$269 million in 2014-15. Almost 58% of Gold Coast Water's forecast operating costs over the 2013-15 period is the cost of purchasing bulk water from Seqwater (Figure 4).

**Figure 4 Gold Coast Water's operating costs 2013-15 (\$m)**

Source: GCW (2013b).

Gold Coast Water's 2013-14 operating cost budget was based on a 'bottom-up' approach and an analysis of historical trends and efficiency opportunities. To develop its 2014-15 forecast, Gold Coast Water extrapolated from the 2013-14 budget using growth indices, cost indices, efficiency forecasts and changes in new initiatives. Table 35 shows Gold Coast Water's detailed operating cost forecast.

**Table 35 Gold Coast Water's forecast operating costs (\$m)**

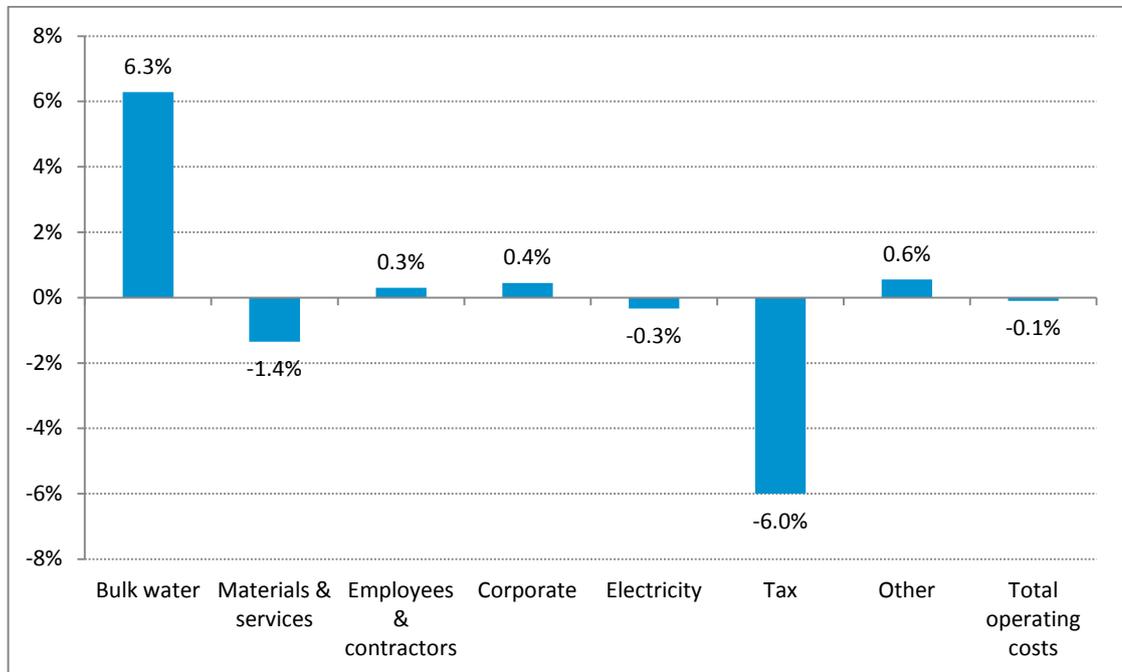
	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Bulk water	125.0	140.6	158.4
Materials & services	34.5	31.2	31.3
Employees & contractors	36.5	37.3	38.9
Corporate costs	21.1	22.2	22.8
Electricity	9.4	8.6	9.0
Non recurrent costs	-	-	-
Tax	15.7	0.8	0.8
Other	5.8	7.2	7.3
<b>Total operating costs</b>	<b>248.1</b>	<b>247.8</b>	<b>268.4</b>

Note: excludes unregulated services. Source: GCW (2013a, 2013b).

Gold Coast Water's 2013-14 operating costs are almost unchanged from 2012-13, due to a \$16 million increase in bulk water costs (over which Gold Coast Water has little control) being

offset by a \$16 million fall in distribution-retail operating costs. However, the QCA notes that this fall is largely due to a very large tax cost estimate in 2012-13 of \$15.7 million, during Gold Coast Water's first year following separation from Allconnex (Figure 5). If tax costs are excluded, Gold Coast Water's operating costs have increased by 6.3% in 2013-14.

**Figure 5 Contributions to change in operating costs 2013-14**



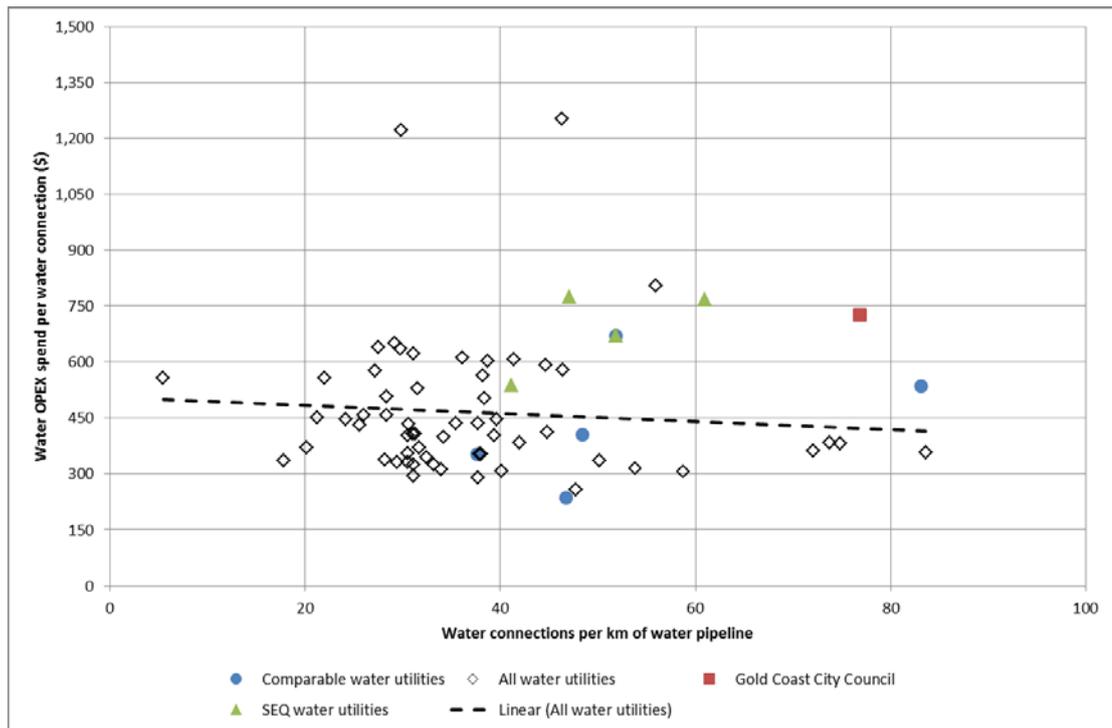
Source: GCW (2013b).

### 5.3 Benchmarking

SKM (2013b) conducted high-level benchmarking of Gold Coast Water's operating expenditure against other Australia water entities. SKM's analysis highlights five entities that were the most comparable to Gold Coast Water.

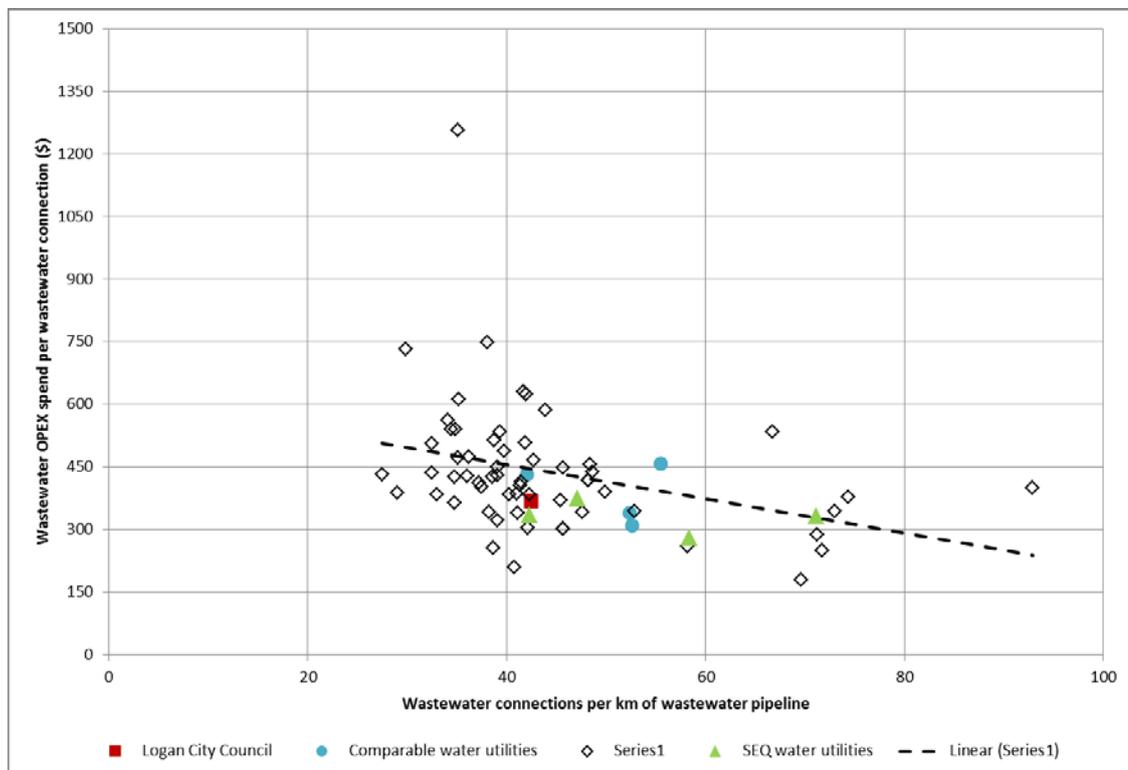
SKM concluded that Gold Coast Water's water operating expenditure was higher than comparable entities and Australian benchmarks. However, Gold Coast Water's sewerage operating expenditure is similar to comparators (Figure 6 and Figure 7).

**Figure 6 Water operating cost benchmarking**



Source: SKM (2013b).

**Figure 7 Sewerage operating cost benchmarking**



Source: SKM (2013b).

## 5.4 Policies and planning

SKM (2013b) found a number of areas where Gold Coast Water's policies and procedures for operating costs are not consistent with good industry practice. These include lack of documentation of compliance processes, not taking a regional perspective to operating expenditure decisions and inadequate asset management processes (Table 36 below).

**Table 36 Assessment of Gold Coast Water's operating costs policies**

<i>Policy</i>	<i>SKM assessment</i>	<i>Possible areas for improvement</i>
Legislative compliance	Not consistent with good industry practice.	Gold Coast Water is in the process of developing a compliance register.
Regional perspective	Not consistent with good industry practice. SKM reviewed a number of procedural documents none of which had explicit provisions to address the requirement for a regional perspective.	Gold Coast Water should consider documenting a regional strategy for service delivery across the Gold Coast region. The strategy should detail mechanisms for collaborating with other service providers in service delivery where appropriate.
Asset management	<b>Not consistent with good industry practice.</b>	Gold Coast Water should consider adopting a series of asset management standards.
Procurement	<b>Consistent with good industry practice and robust.</b>	Could undertake post-implementation benefits realisation reviews of projects
Budget formation	<b>Consistent with good industry practice and robust.</b>	Could benchmark controllable operating expenditure against similar entities.

Source: SKM (2013b).

The QCA notes SKM's findings and recommends that Gold Coast Water put in place policies and procedures to achieve good industry practice in the above areas.

## 5.5 Bulk water

The Ministerial Direction requires the QCA to allow Gold Coast Water to treat bulk water costs as a 'cost-pass-through' item. To this end, the QCA has reviewed Gold Coast Water's tariffs (**Appendix B**) against those charged by Seqwater. Gold Coast Water has correctly passed through the bulk water price to customers.

The QCA adjusted the Gold Coast Water's submitted bulk water cost in 2014-15 for consistency with Gold Coast Water's submitted bulk water demand, a reduction of 0.8% in 2014-15. The QCA then adjusted Gold Coast Water's bulk water demand to reflect the QCA's view of bulk water demand (Chapter 3) and made a further 1.7% and 4.4% reduction to bulk water costs in 2013-14 and 2014-15 respectively (Table 37). The bulk water costs are then passed-through into the MAR.

**Table 37 Bulk water costs**

	<b>2013-14</b>	<b>2014-15</b>
Gold Coast Water bulk water cost (\$m)	140.6	158.4
Gold Coast Water bulk water cost (\$m, adjusted for consistency with submitted bulk water demand)	140.6	157.2
Gold Coast Water bulk water demand (ML)	56,920	57,887
QCA bulk water demand (ML)	55,956	55,786
Bulk water price (\$/kl)	2.47	2.72
QCA revised bulk water cost (\$m)	138.21	151.46
Variance (\$m)	-2.38	-6.90
Variance (%)	-1.7%	-4.4%

Source: GCW (2013b), DEWS (2013b).

## 5.6 Prudence and efficiency of non-bulk operating costs

Consistent with the Ministerial Direction, the QCA has reviewed the prudence and efficiency of materials and services, employees (and contractors), corporate costs and electricity. These represent 93% of Gold Coast Water's non-bulk operating costs in 2013-15 (Table 38).

**Table 38 Gold Coast Water non-bulk operating costs sampled for review (\$m)**

<b>Cost</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Materials & services	34.52	31.17	31.26
Employees & contractors	36.55	37.29	38.90
Corporate costs	21.09	22.19	22.76
Electricity	9.40	8.58	8.96
<b>Total sample</b>	<b>101.56</b>	<b>99.23</b>	<b>101.89</b>
Total non-bulk operating costs	123.07	107.24	110.07

Source: GCW (2013b), SKM (2013b).

The QCA's review considers whether each sampled expenditure item is:

- (a) prudent - required to meet Gold Coast Water's legal and regulatory obligations or its contracts with customers and
- (b) efficient - undertaken in a least-cost manner over the life of the relevant assets and is consistent with relevant benchmarks.

### Materials and services

Materials and services costs include contractors used by Gold Coast Water for maintenance work and materials used by internal and external staff for maintenance purposes. Gold Coast

Water forecast a 9.7% decline in materials and services in 2013-14, followed by a 0.3% increase in 2014-15.

Gold Coast Water informed SKM that materials and services forecasts are based on historical information, with some 'bottom up' calculations for specific one-off requirements. Materials and services costs are escalated at 2.5%, the mid-point of the RBA medium-term inflation target range.

In discussions with Gold Coast Water, SKM identified \$665,700 of unregulated expenditure, mostly relating to laboratory services that was inadvertently included in 2012-13 materials and services costs and should be removed from the originally submitted amount. The QCA accepts this adjustment to 2012-13 costs.

In relation to 2013-15 costs, SKM considers that Gold Coast Water's procurement policies and procedures are in accordance with good industry practice and are robust. This is likely to result in a fair market value for the materials and services items. Moreover, SKM noted that both the 2013-14 and 2014-15 budget growth for materials and services are significantly below the average inflation rate.

As a result, SKM considered Gold Coast Water's 2013-15 materials and services costs to be prudent and efficient. The QCA accepts SKM's findings (Table 39).

**Table 39 Revised Gold Coast Water materials and services costs (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Water	11.28	10.31	10.49
Sewerage	22.57	20.86	20.77
QCA total	33.85	31.17	31.26
Gold Coast Water total	34.52	31.17	31.26
Variance	-0.67	-	-

Source: SKM (2013b).

### Employee and contractor costs

Gold Coast Water (2013b) has budgeted for employee expenses of \$37.3 million in 2013-14, rising to \$38.9 million in 2014-15. Gold Coast Water does not separately budget for contractors, which are included in Materials and services (above).

#### 2012-13 employee costs

Gold Coast Water submitted employee costs of \$36.6 million in 2012-13. However, during SKM's review, Gold Coast Water advised a revised 2012-13 employee cost estimate to:

- (a) remove unregulated laboratory costs (-\$1.7 million)
- (b) increase the allowance for overtime to better reflect estimated actuals (+\$1.0 million).

The QCA accepts the revised estimate and has reduced 2012-13 employee costs by a net amount of \$0.7 million.

#### Full-time equivalent positions

Gold Coast Water's budgeted FTEs have remained stable since de-amalgamation from Allconnex Water (Table 40).

**Table 40 Gold Coast Water FTEs**

<i>Area</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>
Asset Solutions	37	35	35
Commercial Performance	12	13	13
Network Reliability	132	131	131
Operational Performance	50	52	52
Operational Strategy	<b>3</b>	<b>7</b>	<b>7</b>
Service Sustainability	43	40	40
System Control	135	133	133
<b>Total</b>	<b>412</b>	<b>411</b>	<b>411</b>

Source: SKM (2013b).

SKM conducted benchmarking of FTE levels in SEQ and concluded that Gold Coast Water's staffing levels are relatively low. SKM considered that the staffing levels are reasonable and reflect the current asset management approach (reactive as opposed to proactive).

SKM noted that a more proactive maintenance approach would likely increase Gold Coast Water's FTE requirements, but that this change is unlikely to eventuate in 2013-15 given the transition back from Allconnex.

The QCA accepts SKM's assessment.

#### Employee cost escalation

Gold Coast Water (2013a) submitted a cost escalation factor of 4.0% per annum for labour costs in 2013-15 to account for inflation, real labour costs and other labour expenses. The QCA notes that this increase is comparable to long term averages of the wage price index (Table 41), but higher than the 3.5% wage price index reflected in the Queensland budget for 2013-14. The latter is underpinned by productivity gains which are expected to enable nominal wages to grow faster than inflation (Queensland Government 2013).

**Table 41 Wage price index**

<i>Wage price index</i>	<i>Compound Average Annual Growth Rate (March 2003-March 2013)</i>
All Industries (Queensland)	3.9%
Electricity, gas, water and waste services (Australia)	4.2%
Construction (Australia)	4.2%

Source: ABS (2013).

SKM considered that Gold Coast Water's 4% increase is not unreasonable and reflects Australian market conditions.

However, SKM did note some inconsistency in Gold Coast Water forecast employee costs increases. Gold Coast City Council's Certified Agreement provides for a 3.1% increase in wages, but Gold Coast Water has applied a 3.5% forecast by Deloitte Access Economics.

Gold Coast Water has also applied an additional 0.5% allowance for the impact of a wage rise on accrued employee entitlements. However, calculations provided to SKM show that the impact on accrued employee entitlements is actually 0.9%.

Despite the inconsistency, SKM considered that the overall increase of 4% is appropriate as both approaches (3.5% + 0.5% or 3.1% + 0.9%) yield the same result.

However, the QCA does not accept the additional allowance for increased employee entitlements. No other entity in SEQ has budgeted for this allowance. Further, the QCA understands that assets to fund the deferred liability for accrued employee entitlements were transferred from Allconnex to the three shareholding councils under similar circumstances.

SKM was informed that Gold Coast Water does not directly hold any assets accrued to finance the employee entitlement liability. Instead these assets are held by Gold Coast City Council and any interest returns from these assets are included in general council's revenue rather than credited to the water business.

Regardless of the internal accounting treatment of assets held for the accrued entitlements of water and wastewater employees, the QCA does not believe that water users should bear this expense. Returns from these assets should be used to fund the increased liabilities resulting from wage increases, rather than augmenting Gold Coast Water's returns to Gold Coast City Council.

The QCA notes that the Certified Agreement expires on 30 June 2015, and will therefore apply for the entire 2013-15 period. As a result, the Gold Coast's Certified Agreement increase of 3.1% is a more appropriate escalator than the Australia-wide index provided by Deloitte of 3.5%.

The QCA has therefore applied only the agreed wage increase (3.1%) to employee costs in 2013-14 and 2014-15. This results in a saving of \$0.3 million and \$0.8 million in 2013-14 and 2014-15 respectively (Table 42).

**Table 42 Recommended employee and contractor expenses (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Water	12.14	11.77	12.14
Sewerage	23.71	25.19	25.96
QCA total	35.85	36.96	38.11
Gold Coast Water submitted	36.55	37.29	38.90
Variance	-0.70	-0.33	-0.80

Source: QCA calculations, GCW (2013b), SKM (2013b).

### Corporate costs

Corporate costs are general corporate expenditures that cannot be readily allocated to other cost types. Gold Coast Water has budgeted \$22.2 million in corporate costs for 2013-14 (Table 43). This is forecast to increase by 2.7% to \$22.8 million in 2014-15.

The corporate functions of Gold Coast Water are provided by internal service providers within Gold Coast City Council in accordance with Service Level Agreements (SLAs). Under the SLA, 20% of Gold Coast City Council's operating expenditure has been allocated to Gold Coast Water in 2013-14.

**Table 43 Gold Coast Water 2013-14 corporate costs (\$m)**

Office of CEO	2.47
People & Safety	0.84
Finance, Risk & Procurement	3.79
Information Services	5.83
Organisational Services	6.38
Other	2.88
<b>Total</b>	<b>22.19</b>

Source: GCW (2013b).

#### Corporate employee costs

Gold Coast Water does not directly employ employees for its corporate functions; it outsources these functions to Gold Coast City Council.

#### Cost of Corporate Services

Gold Coast Water has applied a cost escalation factor of 2.5% to its corporate costs; however an increase in business as usual costs has resulted in an overall increase in corporate costs of 5.2% in 2013-14. The key drivers of this increase are:

- Information services costs associated with the implementation of a new SAP system (\$1.4 million)
- Correction of previously underestimated insurance premiums (\$1.8 million)
- An increase in the costs of the Finance function (\$0.8 million).

In reviewing these cost drivers, SKM has concluded that the SAP system cost increase should be offset by efficiency gained through business process improvements realised from this investment resulting in savings of \$1.3 million.

SKM has also recommended that Gold Coast Water seek additional quotes from other insurance providers to ensure value for money in its insurance premiums.

The QCA accepts SKM's finding and has removed \$1.3 million from recommended corporate costs for 2013-14.

#### Conclusion

The QCA considers that there is scope for Gold Coast Water to make savings in its corporate costs (Table 44).

**Table 44 Adjustments to Gold Coast Water's corporate costs (\$m)**

<i>Adjustment</i>	<i>2013-14</i>	<i>2014-15</i>
Information services	-1.31	-1.33
<b>Total adjustments</b>	<b>-1.31</b>	<b>-1.33</b>

Source: SKM (2013b).

## Electricity

Gold Coast City Council purchases electricity, on behalf of Gold Coast Water, through a single contract but with separate charges for small sites (less than 100MWh of consumption per annum) and large sites (more than 100MWh of consumption per annum).

The existing contract is due to expire on 31 December 2013. As a result, Gold Coast City Council has recently launched a tendering process for its small sites. Gold Coast City Council has also recently completed a tendering process, in collaboration with other SEQ local councils, for retail electricity for large contestable sites for 2014 to 2016.

## Energy use

Gold Coast Water has forecast growth in energy use of 2% for most of its sites between 2012-13 and 2013-14 based on its forecast growth in bulk water and sewerage flows over this period. Gold Coast Water expects energy use at its Coombabah STP to grow by 10% between 2013-14 and 2014-15 due to an anticipated increase in demand from the stage 5 augmentation of the plant.

As in the previous review, the QCA considers that the key drivers of energy use are bulk water volumes (for water services) and sewerage connections (for sewerage services).

The QCA has therefore used its forecast of growth in bulk water volumes and sewerage connections to forecast Gold Coast Water's energy use. This equates to growth between 2012-13 and 2013-14 of -1.1% for water services and 0.7% for wastewater services.

The only exception is the Coombabah STP, where the QCA accepts Gold Coast Water's forecast load growth of 10% between 2012-13 and 2013-14.

## Energy prices

Gold Coast Water submitted that it had escalated its electricity prices for 2012-13 by 11.83% to obtain forecasts for 2013-14.

Gold Coast Water has provided information which shows that small sites account for about 90% of its electricity costs. For these sites, the current contract rate amounts to a discount of 20% off the regulated retail tariff.

The appropriate price increase to apply to small sites is the QCA's electricity retail tariff determinations (QCA 2012b and 2013b), adjusted for any discount. Since Gold Coast Water received a discount of 20% off the regulated retail price in 2012-13 and 2013-14, the net increase in its retail prices for small sites is 15% in 2013-14. This reflects the weighted average of the increase in the service charge (21%), peak variable charge (26%) and off-peak variable charge (3%) as per QCA (2013b).

For its large sites, the recently completed contract prices, which come into effect on 1 January 2014, indicate an annualised increase of 31.2% for 2013-14.

These price increases for small and large sites amount to a total weighted average increase of 16.6% in 2013-14. As Gold Coast Water has nominated a cost escalator for 2013-14 which is less than 16.6%, the QCA considers this to be efficient.

When combined with the forecast growth in energy use, this would imply an overall increase in costs of more than 14%.

This does not reflect the data in the information template which Gold Coast Water has subsequently amended.

In addition to its cost escalation factor, Gold Coast Water has forecast a carbon price of 2.4 c/kWh for 2013-14. The QCA has revised this to 2.169 c/kWh consistent with its retail electricity tariff determination for 2013-14.

The adjustments to Gold Coast Water's electricity costs are summarised in Table 45.

**Table 45 Adjustments to Gold Coast Water's electricity costs (\$m)**

<i>Adjustment</i>	<i>2013-14</i>	<i>2014-15</i>
Adjustment	1.15	1.20
Carbon price	-0.10	-0.11
<b>Total adjustments</b>	<b>1.05</b>	<b>1.09</b>

Source: QCA calculations.

The QCA has escalated the 2013-14 electricity costs by 4.5% to obtain 2014-15 estimates as proposed by Gold Coast Water (2013a).

### Tax

Gold Coast Water submitted a tax cost of \$0.85 million in 2013-14. The QCA's tax estimate is calculated to be consistent with its estimate of the MAR (Chapter 7). As a result, it is slightly higher (Table 46).

**Table 46 Tax (\$m)**

	<i>2013-14</i>	<i>2014-15</i>
Gold Coast Water submitted	0.85	0.85
QCA recommended	2.08	2.33
Variance	+1.23	+1.49

Source: QCA calculations.

## 5.7 Operating costs summary

Across 2013-15, the QCA has adjusted Gold Coast Water's estimates of operating costs for:

- (a) reduced bulk water demand (-\$9.3 million)
- (b) the removal of an allowance for increased employee entitlements (-\$1.1 million)
- (c) offsetting corporate ICT cost increases by efficiencies gained through business process improvements (-\$2.6 million)
- (d) application of a cost escalation factor to Gold Coast Water's electricity estimates (+\$2.1 million)
- (e) a revised tax estimate (+\$2.7 million)

Overall, this is a decrease of \$8.2 million or 1.6% of Gold Coast Water's operating costs.

**Table 47 Revised operating costs 2013-15 (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Bulk water	138.2	151.5
Materials & services	31.2	31.3
Employees & contractors	37.0	38.1
Corporate costs	20.9	21.4
Electricity	9.6	10.1
Tax	2.1	2.3
Other	7.2	7.3
Total operating costs	246.1	262.0
Gold Coast Water proposed total	247.8	268.4
Variance	-1.74	-6.45

*Note: excludes unregulated services. Source: SKM (2013b), QCA calculations.*

## 6 MAXIMUM ALLOWABLE REVENUES

### 6.1 Scope of review

The Ministerial Direction requires the QCA to monitor water and sewerage revenues against the MAR based on the total prudent and efficient costs of carrying on the activity including:

- (a) operating and maintenance costs
- (b) capital costs (including return on capital and depreciation)
- (c) tax payable.

The Direction also requires the QCA to provide information to customers about the costs and other factors underlying the provision of water and sewerage services.

### 6.2 Elements underpinning total costs

Gold Coast Water noted the following elements underpin changes to its estimate of total costs:

- (a) the asset offset approach to the treatment of capital contributions from 1 July 2013
- (b) the new benchmark WACC of 6.57%, noting its concerns would be raised during the QCA's broader WACC review.

The QCA accepts Gold Coast Water's change to an asset offset approach to capital contributions, as this is allowed under the Direction and is the QCA's preferred treatment. Further, the QCA must adopt the benchmark WACC of 6.57%.

### 6.3 Costs for 2013-15

The key components of Gold Coast Water's costs for its water and sewerage activities are set out in Table 48 and Table 49 below.

**Table 48 Gold Coast Water Costs - Water (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Bulk water	140.59	158.36
Other operating costs	32.28	33.48
Return on capital	39.69	39.79
Return of capital	31.36	30.35
<b>Total Costs</b>	<b>243.93</b>	<b>261.98</b>

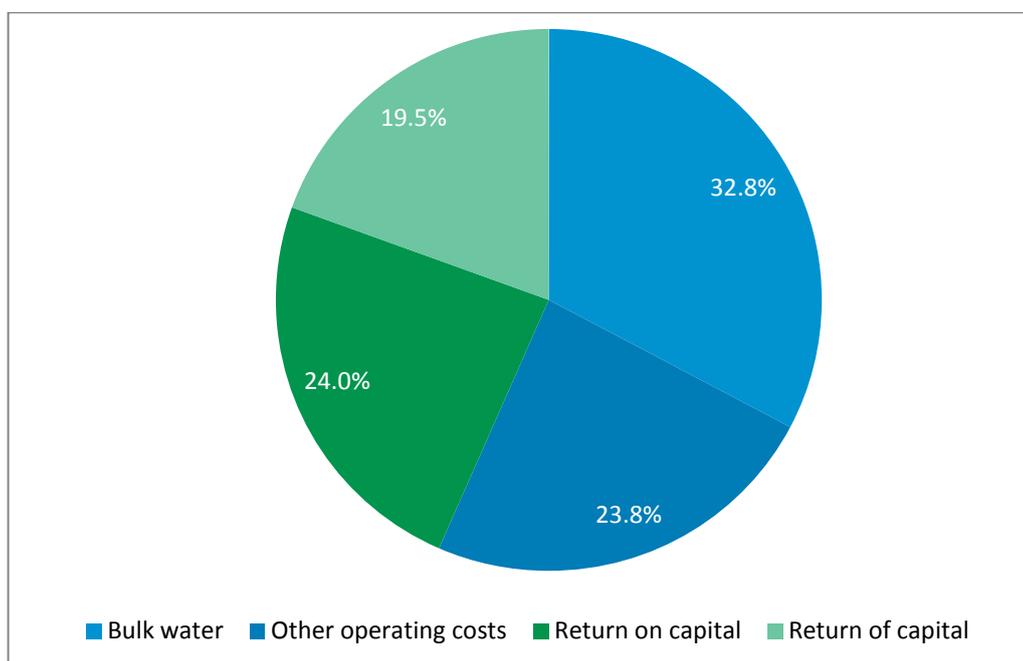
Source: GCW (2013a and 2013b).

**Table 49 Gold Coast Water Costs - Sewerage (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Operating costs	74.73	76.82
Return on capital	69.70	69.46
Return of capital	59.27	56.67
<b>Total Costs</b>	<b>203.70</b>	<b>202.95</b>

Source: GCW (2013a and 2013b).

The key components of Gold Coast Water's total costs for 2013-15 are shown in the figure below.

**Figure 8 Gold Coast Water total costs for 2013-15**

Source: GCW (2013b).

### QCA MAR for 2013-15

As noted above, the MAR is the QCA's estimate of the prudent and efficient costs of carrying on a water and sewerage activity. This reflects the QCA's view of prudent and efficient operating and capital costs (see previous chapters), the asset offset approach to the treatment of capital contributions and the benchmark WACC of 6.57%.

For both water and sewerage, the MAR lies below GCW's estimate of total costs.

The differences between Gold Coast Water's submitted costs and the QCA's MAR are detailed in previous chapters. In summary, the key differences are:

- (a) a lower estimate of bulk water demand (-\$9.3 million)
- (b) a net increase to retail-distribution operating costs (+\$1.1 million) arising from:
  - (i) the removal of an allowance for increased employee entitlements (-\$1.1 million)
  - (ii) offsetting corporate ICT cost increases by efficiencies gained through business process improvements (-\$2.6 million)

- (iii) revisions to Gold Coast Water's forecasts of electricity prices(+\$2.1 million)
- (iv) a revised tax estimate, calculated to be consistent with the QCA's estimate of the MAR (+\$2.7 million)
- (c) a lower estimate of return on capital, mainly due to a lower asset base(-\$3.6 million)
- (d) a lower estimate of return of capital, mainly due to a lower asset base (-\$5.3 million).

**Table 50 QCA MAR - Water (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Bulk water	138.2	151.5
Other operating costs	32.3	33.2
Return on capital	40.1	40.2
Return of capital	31.0	30.0
<b>Total Costs</b>	<b>241.6</b>	<b>254.8</b>

Source: QCA (2012a, 2013a and calculations).

**Table 51 QCA MAR - Sewerage (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Other operating costs	75.6	77.4
Return on capital	67.3	67.4
Return of capital	57.0	54.4
<b>Total Costs</b>	<b>199.9</b>	<b>199.1</b>

Source: QCA (2012a, 2013a and calculations).

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## 7 COMPARING REVENUES WITH MAR

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Under the Ministerial Direction, the QCA must monitor water and sewerage revenues against the MAR based on the total prudent and efficient costs of carrying on the activity.

### 7.1 Gold Coast Water Submission

Gold Coast Water compared its forecast revenues against its estimate of the costs of delivering water and sewerage activities for each of 2013-14 and 2014-15.

For 2013-14, Gold Coast Water submitted:

- (a) water revenue of \$241.0 million is below its total costs of \$243.9 million
- (b) sewerage revenue of \$187.7 million is below its total costs of \$203.7 million
- (c) as a whole, revenues of \$428.7 million are below total costs of \$447.6 million.

For 2014-15, Gold Coast Water submitted:

- (a) water revenue of \$257.1 million is below its total costs of \$262.0 million
- (b) sewerage revenue of \$189.6 million is below its total costs of \$203.0 million
- (c) as a whole, revenues of \$446.7 million are below total costs of \$465.0 million.

### 7.2 QCA Analysis

#### Caveat on 2014-15 findings

As noted previously, Gold Coast Water's 2013-14 revenues are the product of its announced 2013-14 prices and its view of demand.

Despite the QCA's requests for information on 2014-15 prices, Gold Coast Water has not yet set its prices for 2014-15. As Gold Coast Water is anticipating some tariff reforms in 2014-15, there is a possibility that the 2014-15 revenue forecasts provided for this review will differ from those that match Gold Coast Water's actual 2014-15 prices.

Under the Direction, the QCA's analysis is based on the 2013-15 revenues forecasts provided for this review. There is no ability under the current Direction to investigate and report on whether subsequent revenue forecasts have materially changed from the previous forecasts, and to update the findings accordingly. Should there be real concerns when Gold Coast Water announces its 2014-15 prices, the State Government can refer this to the QCA for separate review.

As there is a lesser degree of confidence about the revenue forecasts for 2014-15, the QCA has separately reported its findings for 2013-14 and 2014-15.

#### Comparison of Gold Coast Water revenues and QCA MAR

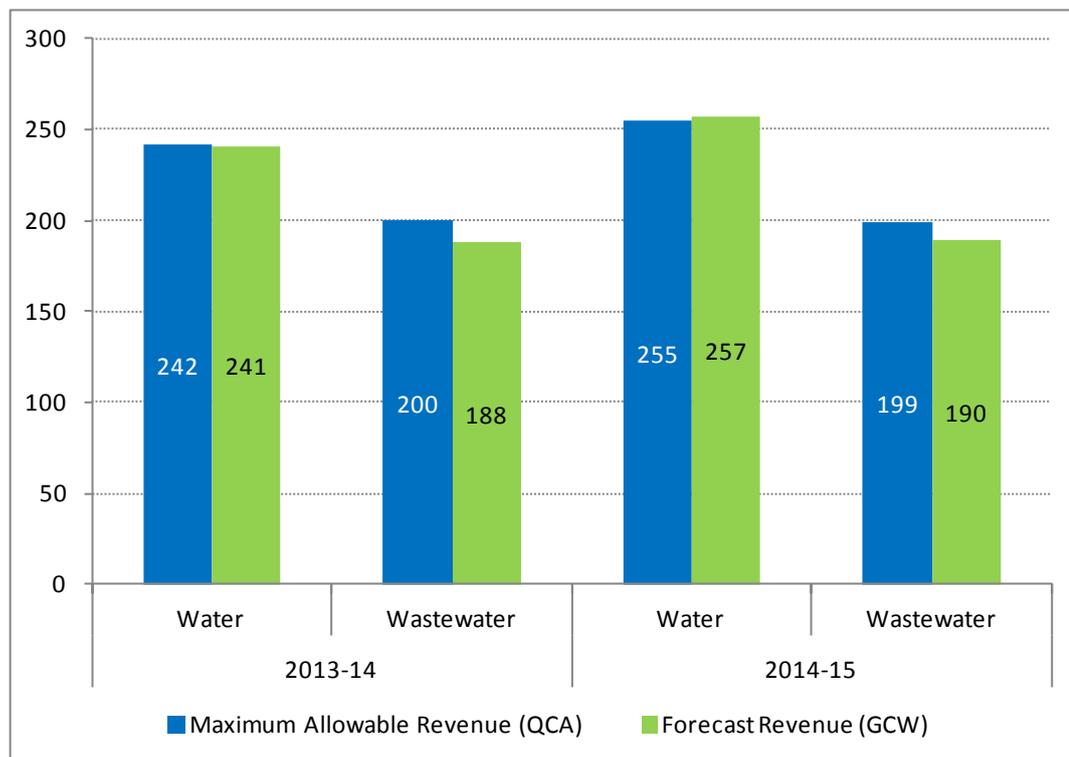
A comparison of Gold Coast Water's water and sewerage revenue forecasts to the QCA's MAR based on the total prudent and efficient costs of carrying on the activity is shown below.

For Gold Coast Water for 2013-14:

- (a) water revenue of \$241.0 million is 0.3% below the QCA MAR of \$241.6 million
- (b) sewerage revenue of \$187.7 million is 6.1% below the QCA MAR of \$199.9 million

- (c) as a whole, revenues of \$428.7 million are 2.9% below the QCA MAR of \$441.5 million.
- For Gold Coast Water for 2014-15:
- (a) water revenue of \$257.1 million is 0.9% above the QCA MAR of \$254.8 million
  - (b) sewerage revenue of \$189.6 million is 4.8% below the QCA MAR of \$199.1 million
  - (c) as a whole, revenues of \$446.7 million are 1.6% below the QCA MAR of \$454 million.

**Figure 9 MAR vs revenue (\$m)**



Source: GCW (2013b), QCA calculations.

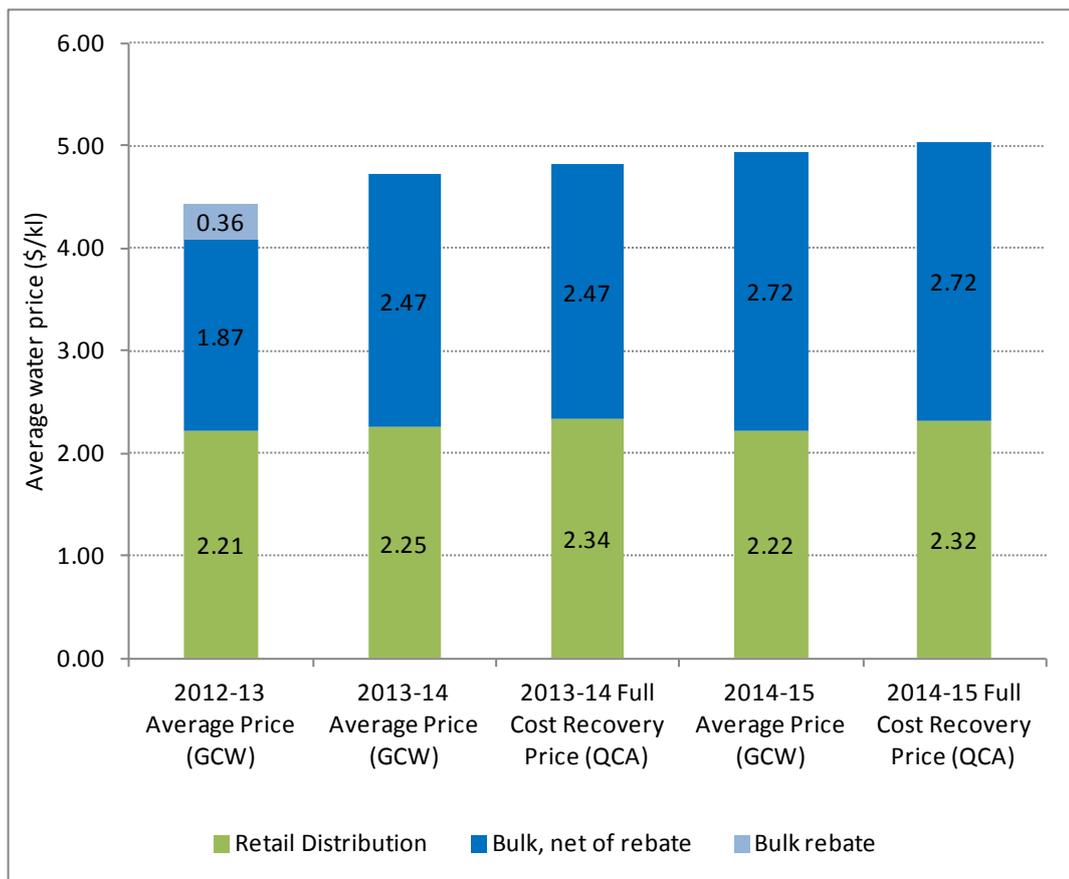
### Comparison of average prices

As in previous years, the QCA has also compared Gold Coast Water's revenues and the QCA's costs on a per unit basis using average prices. Average prices are calculated by dividing total revenues by volumes – per kl (for water) and per connection (for sewerage). Average prices provide a broad overview of the average revenue earned per unit across all users.

Gold Coast Water's average annual prices are slightly below the prices which would fully recover costs for 2013-14 and 2014-15 (as shown in Figure 10 and Figure 11 below). As stated in previous reports, prices should ideally be set and smoothed over a longer period to avoid large annual variations.

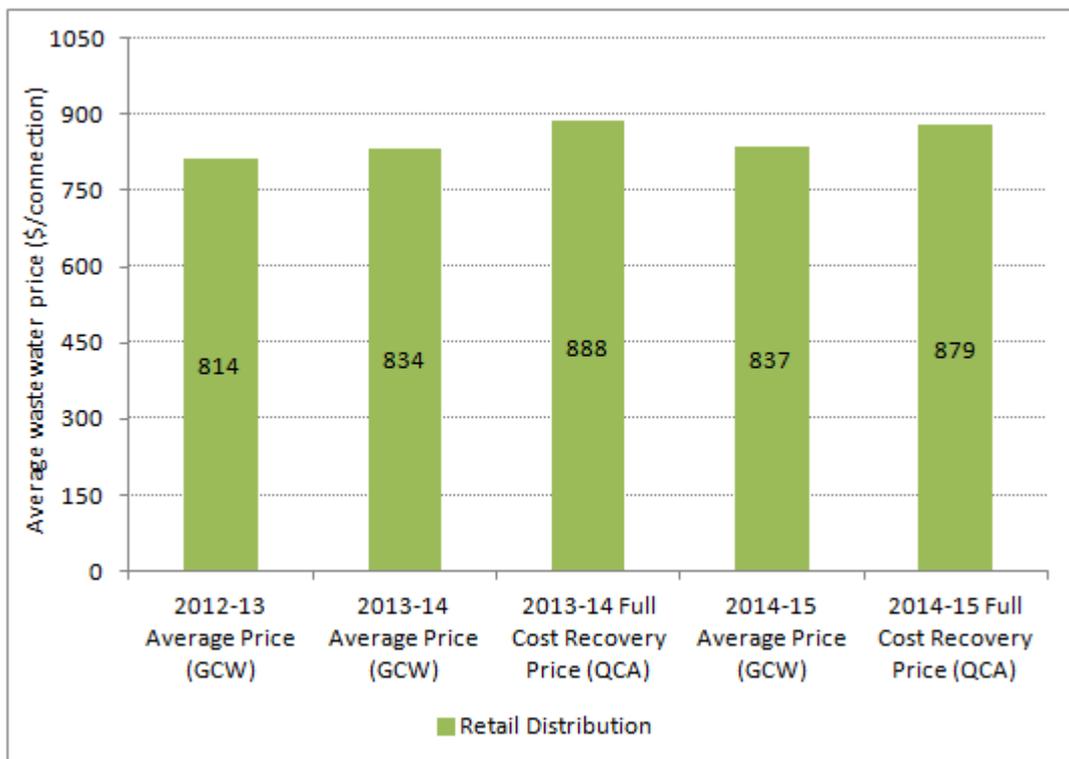
It is noted that the average water price for 2013-14 estimated on the basis of Gold Coast Water's costs is lower than that based on the QCA's estimated full costs. While this would seem inconsistent with the finding that Gold Coast very marginally over-recovers water costs, the comparison of average prices reflects the differences in estimated water demand.

**Figure 10 Average water prices**



Source: GCW (2013b), QCA calculations.

**Figure 11 Average sewerage prices**



Source: GCW (2013b), QCA calculations.

### Comparison using consistent demand

As in previous years, the QCA has further supplemented the comparison of revenues and the MAR by using an estimate of revenue that the QCA expects Gold Coast Water to receive. This estimate is based on the QCA's demand figures. The comparison of revenues and costs is then based on a consistent estimate of demand.

**Table 52 Further comparison of revenues and QCA MAR (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
QCA MAR	441.5	454.0
QCA Expected Revenues	425.4	n/a
Difference	-16.1	n/a

*Note: GCW has not provided price estimates for 2014-15, so the QCA cannot forecast likely revenues. Source: QCA calculations.*

### Carrying forward under-recoveries

In its previous reviews for 2010-13, the QCA has not carried over any under-recovery from previous years in calculating the MAR, consistent with the entities' approaches in those years.

In its 2013-15 submission, Gold Coast Water notes it is under-recovering by 3.9% but does not identify whether it plans to recover this in future (GCW 2013a).

In previous years' reports, the QCA noted that, in calculating the benchmark MARs for the purposes of price monitoring, it would take account of any smoothing adopted by entities to avoid price shocks (QCA 2011). The QCA noted its in-principle support for an NPV neutral glide path to achieve full cost recovery, wherever possible (2011, 2012a, 2013a). Further, that under and overs regimes in regulatory pricing are typically based on actual data (2013a).

However, the QCA also noted that:

- (a) an NPV neutral glide path is not always possible, particularly in the context of significant price increases, without prices in the final year being substantially in excess of their efficient level, requiring transitioning (down) in the next period
- (b) under a price monitoring framework in which the objective is to constrain the exercise of market power in a light-handed manner, under-recovery may be the legitimate exercise of Unitywater's discretion to forego these revenues and accept a lower rate of return. Where this does not jeopardise the financial viability of the entity this is a legitimate business decision. The QCA noted that Unitywater had not priced to the level of the cap (2013a).

In its Draft Report for QUU for 2013-15, the QCA has noted that to allow entities to potentially recoup past under-recovery due to the price cap would not be consistent with the spirit and intention of the relevant legislation (QCA 2014 QUU). To allow entities to charge more in later years to make up for the price cap in 2011-12 and 2012-13 would leave customers no better off in NPV terms.

Therefore, the QCA would not include any past under-recovery due to the price cap to be carried forward in its estimate of prudent and efficient costs.

Further, as in previous reviews, the QCA is not in position to provide guidance on any particular under and overs regime or glide path as it has not been provided with a detailed proposal and the underpinning data, modelling and assumptions. In particular, the level of over-recovery

sought in the later years of the scheme is not provided. The appropriateness of a glide path typically hinges on this longer term information. The QCA has calculated annual stand-alone MARs pending this detailed information.

### QCA Finding

The QCA notes that revenues exceed MAR for water services by 0.9% in 2014-15. This represents very marginal over-recovery. However, sewerage revenues are less than MAR by a greater amount. As a result, Gold Coast Water's total revenues are below MAR in 2013-14 and 2014-15.

The QCA therefore concludes that there is no evidence of an exercise of monopoly power. The QCA recommends that Gold Coast Water's future pricing decisions consider the balance of revenues being earned from water and sewerage to avoid over-recoveries in either service.

## 8 COSTS, REVENUES AND PRICES

The reconciliation of costs, revenues and average prices is outlined in Table 53 and Table 54 below.

**Table 53 Costs and revenues 2013-15 (\$m)**

	2013-14				2014-15			
	Water		Sewerage		Water		Sewerage	
	GCW	QCA	GCW	QCA	GCW	QCA	GCW	QCA
Bulk water	140.6	138.2	-	-	158.4	151.5	-	-
Other opex	32.3	32.3	74.7	75.6	33.5	33.2	76.8	77.4
Return on capital	39.7	40.1	69.7	67.3	39.8	40.2	69.5	67.4
Return of capital	31.4	31.0	59.3	57.0	30.4	30.0	56.7	54.4
<b>Total Costs (MAR)</b>	<b>243.9</b>	<b>241.6</b>	<b>203.7</b>	<b>199.9</b>	<b>262.0</b>	<b>254.8</b>	<b>203.0</b>	<b>199.1</b>
Total Revenues	241.0	241.0	187.7	187.7	257.1	257.1	189.6	189.6
<b>Over/(Under) recovery</b>	<b>-2.9</b>	<b>-0.6</b>	<b>-16.0</b>	<b>-12.2</b>	<b>-4.9</b>	<b>2.3</b>	<b>-13.4</b>	<b>-9.5</b>

Source: GCW (2013b), QCA calculations.

**Table 54 Average Prices**

	2013-14				2014-15			
	Water		Sewerage		Water		Sewerage	
	GCW	QCA	GCW	QCA	GCW	QCA	GCW	QCA
Total Revenues/MAR (\$m)	241.0	241.6	187.7	199.9	257.1	254.8	189.6	199.1
Volume ('000 ML or '000 connections)*	51.1	50.2	225.1	225.1	52.1	50.6	226.6	226.6
<b>Average Price (\$/kl or \$/connection)</b>	<b>4.72</b>	<b>4.81</b>	<b>834.03</b>	<b>888.22</b>	<b>4.94</b>	<b>5.04</b>	<b>836.65</b>	<b>878.60</b>

Note: non-revenue water has been excluded in deriving average prices. Source: GCW (2013b), QCA calculations.

## 9 KEY FINDINGS FOR 2013-15

In 2013-14, the retail and distribution component of prices for residential and non-residential customers increased by 2.1%. Gold Coast Water has not announced its prices for 2014-15, and its revenue forecast for 2014-15 reflects a broad organisational target.

Bulk water costs account for 32.8% of Gold Coast Water's total costs of supplying water and sewerage activities in 2013-15. Retail and distribution costs account for the remainder with operating costs comprising 23.8% and capital costs 43.5%

Gold Coast Water's revenues lie below the QCA's MAR in both years (Figure 12).

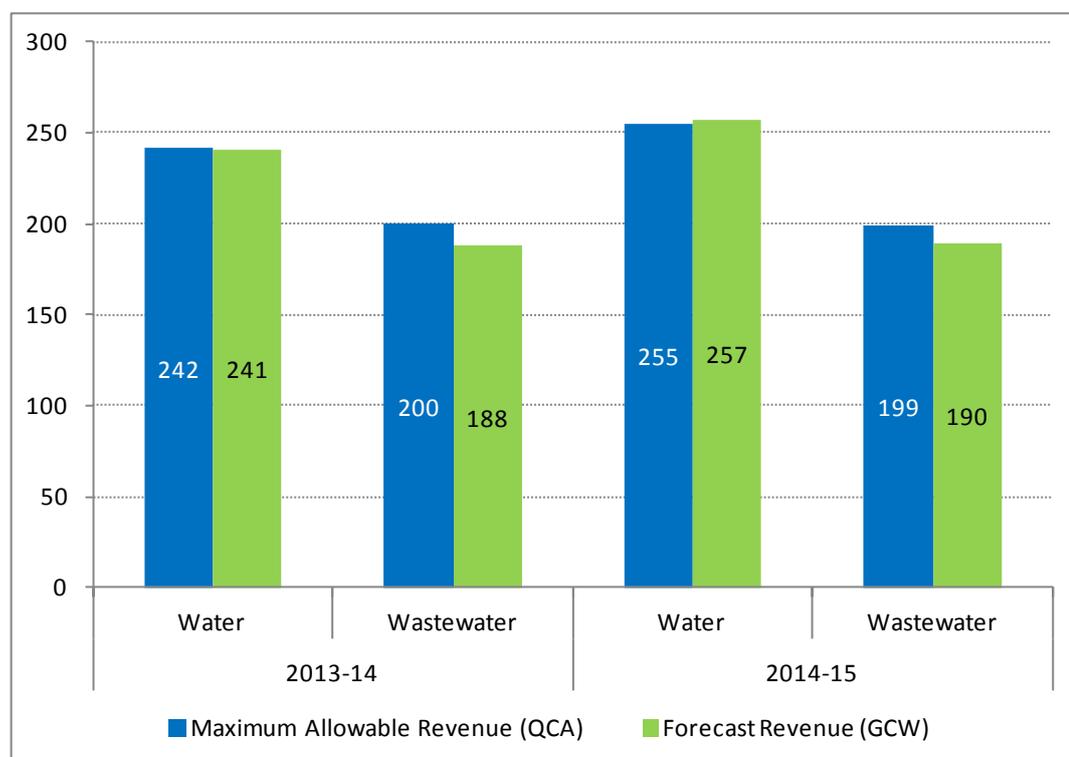
For Gold Coast Water for 2013-14:

- (a) water revenue of \$241.0 million is 0.3% below the QCA MAR of \$241.6 million
- (b) sewerage revenue of \$187.7 million is 6.1% below the QCA MAR of \$199.9 million
- (c) as a whole, revenues of \$428.7 million are 2.9% below the QCA MAR of \$441.5 million.

For Gold Coast Water for 2014-15:

- (a) water revenue of \$257.1 million is 0.9% above the QCA MAR of \$254.8 million
- (b) sewerage revenue of \$189.6 million is 4.8% below the QCA MAR of \$199.1 million
- (c) as a whole, revenues of \$446.7 million are 1.6% below the QCA MAR of \$454 million.

**Figure 12 MAR and revenue (\$m)**



Source: GCW (2013b), QCA calculations.

Although the QCA has calculated a marginal over-recovery on water services, there is no evidence of an exercise of monopoly power on a total cost basis in 2013-14 or 2014-15. However, the finding for 2014-15 is based on Gold Coast Water's original revenue forecast for

2014-15 made in 2013, before 2014-15 prices were set. Should there be concerns that updated revenue forecasts for 2014-15 (that align with 2014-15 prices) differ materially from those originally forecast, the State Government can refer the issue to the QCA for further review.

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## APPENDIX A: MINISTERIAL DIRECTION

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### QUEENSLAND COMPETITION AUTHORITY ACT 1997 SECTIONS 23A MINISTERS' REFERRAL NOTICE

#### **Referral**

As the responsible Ministers, pursuant to section 23A of the *Queensland Competition Authority Act 1997* (the QCA Act), we refer the monopoly distribution and retail water and sewerage activities (the activities) of the following entities (the entities):

- Northern SEQ Distributor-Retailer (Unitywater);
- Central SEQ Distributor-Retailer (Queensland Urban Utilities);
- Logan City Council;
- Redland City Council; and
- Gold Coast City Council;

to the Queensland Competition Authority (QCA) for a price monitoring investigation for the period from 1 July 2013 to 30 June 2015.

#### **Conduct of the QCA pursuant to this referral**

In referring this investigation, we direct the QCA under section 24 of the Act as follows. For each entity, the QCA shall:

- (a) provide information to customers about the costs and other factors underlying the provision of water and sewerage services including distinguishing between bulk and distribution/retail costs to the extent possible;
- (b) allow the entities to treat bulk water costs as a 'cost-pass-through' item;
- (c) monitor the change in prices of distribution and retail water and sewerage services for residential and non-residential customers;
- (d) monitor water and sewerage revenues against the maximum allowable revenue based on the total prudent and efficient costs of carrying on the activity including each of the following:
  - i. the operational and capital expenditure in carrying on the activity;
  - ii. depreciation;
  - iii. return on capital employed; and
  - iv. tax payable.
- (e) in respect of the return on capital:
  - i. advise a benchmark Weighted Average Cost of Capital (WACC) by 31 January 2013; and
  - ii. monitor the WACCs applied by the entities against the benchmark WACC;

- (f) roll forward the regulated asset base (RAB) using the following principles:
- i. the opening RAB for 1 July 2013 to be calculated as:
 
$$\text{RAB}_t = \text{RAB}_{t-1} + \text{Capital expenditure}_t - \text{Regulatory Depreciation}_t - \text{Disposal}_t + \text{Indexation}_t$$

*where t = year under consideration.*
  - ii. for Unitywater and Queensland Urban Utilities:
 

RAB<sub>t-1</sub> = the rolled forward RAB for 1 July 2012 as verified by the QCA;
  - iii. for Logan, Redland and Gold Coast City Councils:
 

RAB<sub>t-1</sub> = the RAB for each individual council as at 1 July 2013 should reflect their agreed disaggregation of the total Allconnex RAB as at 1 July 2010 and subsequent capital expenditure incurred to 30 June 2013;

for clarity, a revaluation of the initial RAB is not to be considered.
- (g) to assess operating and capital expenditure in (d) above, the QCA is to undertake a review not more than once per entity during the monitoring period based on the following approach:
- i. assess the existence of robust policies and procedures having regard to good industry practice, as well as compliance, using a sample of six capex projects (per entity) and each of the following broad opex headings: employee expenses (including contractors); electricity; other materials and services; corporate overheads;
  - ii. assess the robustness of the capex and opex program planning and delivery processes and procedures in an overall sense and identify any areas for improvement; and
  - iii. form a view on the prudence and efficiency of capital and operating expenditure, focussing on any areas of significant cost increase and identifying the reasons why.
- (h) the QCA is to accept that, in setting prices entities may have applied a revenue offset approach to account for capital contributions received. This approach is to remain in effect until such time as the entity nominates, through their price monitoring returns, to adopt the asset offset method. Where a change in methodology is adopted, the RAB is not to be adjusted retrospectively.
- (i) to assess Regulatory Depreciation in (f) above, the QCA must take into account the regulatory depreciation on the physical assets has been calculated using existing useful lives attaching to the individual assets or relevant asset classes;
- (j) to assess the indexation in (f) above, the QCA must use the annual March to March Australian Bureau of Statistics Consumer Price Index (all groups, Brisbane);
- (k) monitor according to the QCA Final Report on the SEQ Interim Price Monitoring Framework (April 2010) and Information Requirements, except as amended by this referral.

**Consultation**

The QCA must undertake an open consultation process with all relevant parties and consider submissions within the timetable for the review and reports. Consistent with section 34 of the QCA Act, all reports and submissions must be published on the QCA website.

**Timing**

The entities must provide price monitoring information returns in respect of 2013-14 and 2014-15 to the QCA by:

- i. 30 June 2013 for Queensland Urban Utilities and Unitywater; and
- ii. 30 September 2013 for Logan, Redland and Gold Coast City Councils.

The QCA must provide to responsible Ministers and the Minister for Energy and Water Supply a draft report by 31 January 2014 and a final report by 31 March 2014.



**TIM NICHOLLS**  
Treasurer and Minister for Trade



**JARROD BLEIJIE**  
Attorney-General and  
Minister for Justice

## APPENDIX B: GOLD COAST WATER SELECTED PRICES<sup>43</sup>

**Table B.1 Water prices**

Service	Category	Tariff Description	Type	Unit	2012-13	2013-14	% change
Water	Residential	Gold Coast City Council Charge	Variable	\$	1.04	1.07	2.1%
Water	Residential	State Bulk Water Charge	Variable	\$	2.23	2.47	11.0%
Water	Non-Residential	Gold Coast City Council Charge	Variable	\$	1.04	1.07	2.1%
Water	Non-Residential	State Bulk Water Charge	Variable	\$	2.23	2.47	11.0%
Water	Non-Residential	Raw water	Variable	\$	0.97	0.99	2.1%
Water	Residential	Water service charge	Fixed	\$	201.50	205.73	2.1%
Water	Non-Residential	20mm connection	Fixed	\$	358.92	366.46	2.1%
Water	Non-Residential	25mm; 0-290 kL consumption	Fixed	\$	358.92	366.46	2.1%
Water	Non-Residential	25mm; > 290 kL consumption	Fixed	\$	560.82	572.60	2.1%
Water	Non-Residential	32mm; 0-290 kL consumption	Fixed	\$	358.92	366.46	2.1%
Water	Non-Residential	32mm; 291kL - 454kL consumption	Fixed	\$	560.82	572.60	2.1%
Water	Non-Residential	32mm; >455kL consumption	Fixed	\$	918.82	938.12	2.1%
Water	Non-Residential	40mm	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	50mm; 0-1160 kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	50mm; > 1160 kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	80mm; 0- 1160 kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	80mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	80mm; >1814kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	100mm; 0-1160kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	100mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	100mm; 1815kL-4640kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	100mm; > 4641kL consumption	Fixed	\$	8,972.90	9,161.33	2.1%
Water	Non-Residential	150mm; 0-1160kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	150mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	150mm; 1815kL-4640kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	150mm; 4641kL-7250kL consumption	Fixed	\$	8,972.90	9,161.33	2.1%
Water	Non-Residential	150mm;>7250kL consumption	Fixed	\$	20,189.04	20,613.01	2.1%
Water	Non-Residential	200mm; 0-1160kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	200mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	200mm; 1815kL-4640kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	200mm; 4641kL-7250kL consumption	Fixed	\$	8,972.90	9,161.33	2.1%
Water	Non-Residential	200mm; 7251kL-16314kL consumption	Fixed	\$	20,189.04	20,613.01	2.1%
Water	Non-Residential	200mm; > 16315kL consumption	Fixed	\$	35,891.60	36,645.32	2.1%
Water	Non-Residential	250mm; 0-1160kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	250mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	250mm; 1815kL-4640kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	250mm; 4641kL-7250kL consumption	Fixed	\$	8,972.90	9,161.33	2.1%
Water	Non-Residential	250mm; 7251kL-16314kL consumption	Fixed	\$	20,189.04	20,613.01	2.1%
Water	Non-Residential	250mm; 16315kL-29000kL consumption	Fixed	\$	35,891.60	36,645.32	2.1%
Water	Non-Residential	250mm; >29000kL consumption	Fixed	\$	56,080.64	57,258.33	2.1%
Water	Non-Residential	300mm; 0-1160kL consumption	Fixed	\$	1,435.66	1,465.81	2.1%
Water	Non-Residential	300mm; 1161kL-1814kL consumption	Fixed	\$	2,243.24	2,290.35	2.1%
Water	Non-Residential	300mm; 1815kL - 4640kL consumption	Fixed	\$	5,742.66	5,863.26	2.1%
Water	Non-Residential	300mm; 4641kL-7250kL consumption	Fixed	\$	8,972.90	9,161.33	2.1%
Water	Non-Residential	300mm; 7251kL-16314kL consumption	Fixed	\$	20,189.04	20,613.01	2.1%
Water	Non-Residential	300mm; 16315kL-29000kL consumption	Fixed	\$	35,891.60	36,645.32	2.1%
Water	Non-Residential	300mm; 29000kL-45314kL consumption	Fixed	\$	56,080.64	57,258.33	2.1%
Water	Non-Residential	300mm; > 45315kL consumption	Fixed	\$	80,756.12	82,452.00	2.1%
Water	Residential	Vacant land	Fixed	\$	201.50	205.73	2.1%
Water	Non-Residential	Vacant land	Fixed	\$	358.92	366.46	2.1%

<sup>43</sup> Residential and non-residential charges, including trade waste and recycled water.

**Table B.2 Sewerage, trade waste, recycled water prices**

Service	Category	Tariff Description	Type	Unit	2012-13	2013-14	% change
Wastewater	Residential	Wastewater service charge	Fixed	\$	688.88	703.35	2.1%
Wastewater	Non-Residential	Wastewater service charge	Fixed	\$	688.88	703.35	2.1%
Wastewater	Residential	Wastewater service charge - vacant land	Fixed	\$	688.88	703.35	2.1%
Wastewater	Non-Residential	Wastewater service charge - vacant land	Fixed	\$	688.88	703.35	2.1%
Wastewater	Non-Residential	Wastewater volume charge	Variable	\$	4.24	4.33	2.1%
Trade waste	Non-Residential	Chemical Oxygen Demand	Variable	\$	1.52	1.55	2.1%
Trade waste	Non-Residential	NonVolatile suspended solids	Variable	\$	0.99	1.01	2.1%
Trade waste	Non-Residential	Phosphorous	Variable	\$	10.93	11.15	2.1%
Recycled Water	Residential	Recycled water class A volume charge	Variable	\$	1.68	1.71	2.1%
Recycled Water	Non-Residential	Recycled water class A volume charge	Variable	\$	1.68	1.71	2.1%

## APPENDIX C: RESIDENTIAL BILL CALCULATIONS

Table C.1 shows the differences in the bill calculations by Gold Coast Water and the QCA in chapter 2. The Gold Coast Water bill is based on 180 kl of water use per year and the QCA bill is based on standard water use of 200 kl of water per year and includes the impact of the bulk water rebate.

**Table C.1: Change in Residential Bills – Gold Coast Water vs QCA**

	Gold Coast Water (180kl/yr)			QCA (200kl/yr)		
	2012-13	2013-14	%	2012-13	2013-14	%
Retail water access	201.50	205.74	2.1%	201.50	205.74	2.1%
Retail water use	187.96	191.90	2.1%	208.84	213.22	2.1%
Retail sewerage access	688.88	703.34	2.1%	688.88	703.34	2.1%
Bulk water	400.50	444.60	11.0%	445.00	494.00	11.0%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
<b>Total Bill</b>	<b>1,478.84</b>	<b>1,545.58</b>	<b>4.5%</b>	<b>1,464.22</b>	<b>1,616.30</b>	<b>10.4%</b>

*Note: Gold Coast Water bill based on average water use of 180kl per year. QCA bill based on standard 200kl of water use per year. Differences arise as QCA has different usage and includes the impact of the bulk water rebate in 2012-13.*

For information, Table C.2 has also been provided which is based on average use of 180 kl per year and shows the impact of the removal of the bulk water rebate in the QCA calculations.

**Table C.2 Change in Residential Bills – Gold Coast Water vs QCA with 180kl per year water use**

	Gold Coast Water (180kl/yr)			QCA (180/yr)		
	2012-13	2013-14	%	2012-13	2013-14	%
Retail water access	201.50	205.74	2.1%	201.50	205.74	2.1%
Retail water use	187.96	191.90	2.1%	187.96	191.90	2.1%
Retail sewerage access	688.88	703.34	2.1%	688.88	703.34	2.1%
Bulk water	400.50	444.60	11.0%	400.50	444.60	11.0%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
<b>Total Bill</b>	<b>1,478.84</b>	<b>1,545.58</b>	<b>4.5%</b>	<b>1,398.84</b>	<b>1,545.58</b>	<b>10.5%</b>

*Note: Both Gold Coast Water and QCA bills based on average water use of 180kl per year. Difference arises as QCA includes the impact of the bulk water rebate in 2012-13.*

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## GLOSSARY OF ACRONYMS, TERMS AND CONDITIONS

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### A

ABS	Australian Bureau of Statistics
AOP	Annual Operational Plan
AOR	Annual Operations Report
APP	Annual Performance Plan

### C

CBU	Commercial Business Unit
CEO	Chief Executive Officer
CPI	Consumer Price Index
CPO	Central Procurement Office

### D

DEHP	Department of Environment and Heritage Protection
Design and Construction Code	SEQ Water Supply and Sewerage Design and Construction Code
DEWS	Department of Energy and Water Supply
DLGP	Department of Local Government and Planning
DR Act	<i>South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 (Qld)</i>
DSDIP	Department of State Development, Infrastructure and Planning

### E

Entity	SEQ service provider as defined by the <i>South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 (Qld)</i>
EP	Equivalent Persons

### F

FTE	Full Time Equivalent
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### G

GAF	Governance Administration and Finance
GCCC	Gold Coast City Council
GCW	Gold Coast Water
GRVs	Gas Release Valves

### I

ICT	Information and Communications Technology
IDM	Infrastructure Demand Model
IIMM	International Infrastructure Management Manual
IWA	International Water Association

### K

kl	Kilolitres
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km Kilometres

## L

l/c/d Litres per connection per day

LGA *Local Government Act 2009 (Qld)*

LGR Local Government Regulation 2012 (Qld)

l/p/d Litres per person per day

## M

m Million

ML Megalitres

mm Millimetres

MAR Maximum Allowable Revenue

MCA Multi Criteria Analysis

## N

N/A Not Applicable

NTS National Tapping Services Pty Ltd

NPV Net Present Value

NWC National Water Commission

## O

OESR Office of Economic and Statistical Research

## Q

QCA Queensland Competition Authority

QCOSS Queensland Council of Social Service

QUU Queensland Urban Utilities

QWC Queensland Water Commission

## R

RAB Regulatory Asset Base

RBA Reserve Bank of Australia

RCC Redland City Council

## S

SEQ South East Queensland

SEQ Regional Plan South East Queensland Regional Plan 2009-2031

SKM Sinclair Knight Merz

SLA Service Level Agreement

SPA *Sustainable Planning Act 2009 (Qld)*

STP Sewage Treatment Plant

## W

WACC Weighted Average Cost of Capital

WSAA	Water Services Association of Australia
WSZ	Water Supply Zone

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