

# Queensland Competition Authority

Final Report

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## SEQ Price Monitoring for 2013-15 Part B - Logan Water

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March 2014

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

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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).

## 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 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 Logan 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, Logan 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. Logan City Council stated that as Gold Coast was the majority shareholder in the jointly-owned Allconnex, its decision to withdraw meant it was no longer viable for Logan and Redland City Councils to continue operating Allconnex under the shareholder business model. Logan City Council subsequently resumed supplying water and wastewater services to the Logan community with the return of its water business on 1 July 2012.<sup>2</sup>

The *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld) (DR Act) provides that the Logan, Gold Coast and Redland City Councils' water and sewerage businesses be established as commercial business units (CBUs) under the *Local Government Act 2009* (Qld) (LGA).<sup>3</sup> As per the *Local Government Regulation 2012* (Qld) (LGR), CBUs conduct business in accordance with the key principles of commercialisation.<sup>4</sup> Briefly, these include clarity of objectives, management autonomy and authority, accountability for performance, and competitive neutrality.<sup>5</sup>

The LGR imposes specific financial planning and accountability obligations on local governments,<sup>6</sup> of which some are directly relevant to Logan Water. For example:

- (a) Logan 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>7</sup>
- (b) Logan 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>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> LW (2013a).

<sup>3</sup> DR Act, s 92AJ.

<sup>4</sup> LGR, ss 27-28.

<sup>5</sup> LGR, s 28.

<sup>6</sup> LGR, ch 5.

<sup>7</sup> LGR, s 169.

<sup>8</sup> LGR, ss 174-175.

- (c) Logan City Council's annual report for a financial year must contain an annual operations report (AOR) for each CBU.<sup>9</sup>

### Logan Water's services

Logan Water provides distribution and retail water and sewerage services to around 290,000 people in its local government area (Figure 1).

Key characteristics of Logan Water's service and asset base appear in Table 1 below.

**Table 1 Logan Water Service and Asset Base**

	<i>Total</i>
Population	290,000
Residential Water Connections	88,000
Non-residential water connections	5,000
Water reservoirs	32
Water supply network (km)	2,026
Sewerage network (km)	1,998
Sewage treatment plants	4

Source: SKM (2014).

**Figure 1 Area serviced by Logan Water**



Source: LW (2013a).

<sup>9</sup> LGR, s 190(1)(c).

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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.

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 Logan Water's average price (based on its revenues) with the QCA's full cost recovery average price (based on its MAR) is now 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

Logan City Council announced that, after harmonisation (see below), water and sewerage charges will increase on average by 10.6% (including the bulk water increase), or a citywide average annual increase of \$159 per household, based on water consumption of 200 kilolitres (kl) per year (LCC 2013a).

#### 2.2.1 Harmonisation

Logan City Council stated that as part of the local government boundary reforms in March 2008, it acquired local government areas from Gold Coast City Council and Beaudesert Shire Council. As part of the boundary reforms, council considered it was required to harmonise all water and sewerage charges by July 2012. Logan City Council also advised that, subsequent to the dissolution of Allconnex in 2012, the (then) Department of Local Government supported council's application to develop a harmonisation plan in 2012-13.<sup>11</sup>

Harmonisation affected the water access charge in 2013-14.<sup>12</sup> In 2012-13, Logan had different water access charges for Logan North (former Logan City Council area), Logan East (ex Gold Coast City Council area) and Logan South (ex Beaudesert Shire Council area). In addition, Logan East had a different set of rules to apply the capacity factor to the water access charge based on the service diameter. Logan Water advised that price harmonisation was applied across the city on a revenue-neutral basis.

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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> Price Harmonisation Fact Sheet. [www.logan.qld.gov.au](http://www.logan.qld.gov.au).

<sup>12</sup> Sewerage prices and water usage charges were already harmonised across Logan for residential and non-residential users in 2012-13.

The QCA has investigated the process adopted by Logan Water to ensure revenue-neutrality. Logan calculated the quarterly revenues under the former 2012-13 prices and the 2013-14 harmonised price was set to result in equivalent revenues. The harmonised and revenue-neutral water access charge of \$263.32 represented:

- (a) an increase for all users in the former Logan City Council area (\$251.84 in 2012-13) and the residents of the former Gold Coast area (\$226.64)
- (b) a decrease for the non-residential users in the former Gold Coast area (\$370.20) and all users in the former Beaudesert area (\$428.16).

The QCA can confirm that harmonisation is expected to be revenue-neutral overall, with prices increasing or decreasing to achieve a common water access charge across council.

### 2.2.2 Price increases

Following harmonisation, prices were set so that there was a citywide 10.6% increase in the water and sewerage bill, for a household using 200kl of water per year. This included the 10.3% increase in the bulk water price (see table below, provided by Logan Water).

**Table 2 Increase in Water and Sewerage Charges**

	<b>2012-13</b>	<b>2013-14</b>	<b>\$ increase</b>	<b>% increase</b>
Sewerage	\$578.00	\$661.60	\$83.60	14.5%
Water Access	\$263.32*	\$279.00	\$15.68	6.0%
Water Volume (200 kl/a)	\$656.42	\$716.25	\$59.83	9.1%
<b>Total Charges based on 200 kl/a</b>	<b>\$1,497.74</b>	<b>\$1,656.85</b>	<b>\$159.11</b>	<b>10.6%</b>
Water Volume (200 kl/a)				
Retail charges	\$179.82	\$190.65	\$10.83	6.0%
Bulk charges	\$476.60	\$525.60	\$49.00	10.3%
	<b>\$656.42</b>	<b>\$716.25</b>	<b>\$59.83</b>	<b>9.1%</b>

\* Harmonised revenue-neutral water base charge of \$263.32 (not the 2012-13 charge). Note: a = annum. Source: LW supporting information (2013).

The QCA notes that the 6% increase in retail and distribution water charges (following harmonisation) and the 14.5% increase in sewerage charges is more than the CPI of 2.1%.

When the increase is based on 2012-13 charges (and therefore including the effect of harmonisation), retail and distribution water access charges for residential and non-residential customers changed significantly across the Logan Water service area – with the net effect ranging from an increase of 23.1% in some areas to a fall of 34.8% in other areas (**Appendix B**). Retail and distribution water usage charges increased by 6.0% and sewerage charges increased by 14.5%. All these increases exceed CPI of 2.1%.

While a legislated CPI cap no longer applies, CPI provides a broad benchmark against which changes in prices can be compared. As a result, price increases that exceed CPI require further explanation. 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 Logan Water's prices is beyond the scope of this review, which primarily focuses on a comparison of revenues and costs (the MAR). The QCA has commenced a separate investigation of pricing principles.<sup>13</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, these retail and distribution price increases exclude the impact of bulk water prices and government subsidies or rebates. The overall or net impact on customers requires consideration of all of these 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, Logan Water has not published prices for 2014-15. In its 2013-15 price monitoring submission, Logan Water provided a target revenue forecast for 2014-15 on an organisation-wide basis rather than a revenue forecast based on individual prices.

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

The QCA has used Logan Water'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.

As noted above, Logan Water announced that water and sewerage charges will increase by a combined 10.6%, representing a citywide annual increase of \$159 per household based on water use of 200kl per annum. This was based on a harmonised water access charge.

The QCA notes that the average increase announced by Logan Water is based on quite a broad range of changes in residential bills in different areas across Logan (see **Appendix C**). For example, the QCA estimates that residential bills for a household using 200kl of water a year will increase by 17.8% in the former Logan City Council area, 20.0% in the former Gold Coast City area and 4.7% in the former Beaudesert Shire area.<sup>14</sup>

The increase calculated by the QCA is based on 2012-13 prices and also takes into account the removal of the State Government bulk water rebate. The State Government provided a one-off \$80 bulk water rebate to residential customers in 2012-13.<sup>15</sup> This rebate no longer applies.

Logan Water excluded the bulk water rebate from its residential bill calculations as it is outside its control. The QCA has included the rebate as it affects the bill paid by residential customers.

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<sup>13</sup> More information is available from the QCA's website: <http://www.qca.org.au/Water/Urban-retail-water/Retail/SEQ-Reg-framework>

<sup>14</sup> As in previous years price monitoring reports, the residential bills in the QCA's analysis are calculated on the basis of 200kl of water use per year. The adoption of a standard usage allows for a focus on the price differences across SEQ and 200kl is the standard usage adopted for national performance reporting purposes (NWC 2010).

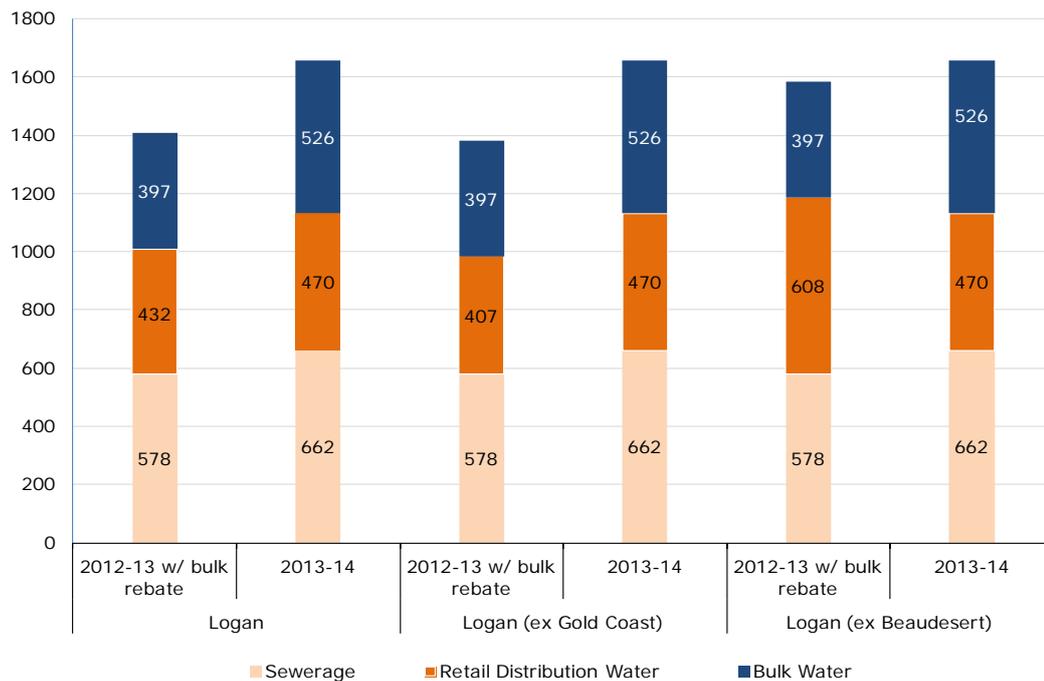
<sup>15</sup> Queensland Government Bulk Water Prices: <http://www.dews.qld.gov.au/policies-initiatives/water-sector-reform/water-pricing/bulk-water-prices>.

While retail water entities do not control government rebates, the QCA is concerned that excluding rebates in the information provided to customers means there is a lack of clarity and transparency about increases in bills in 2013-14.

The QCA considers it appropriate 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 Logan 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.

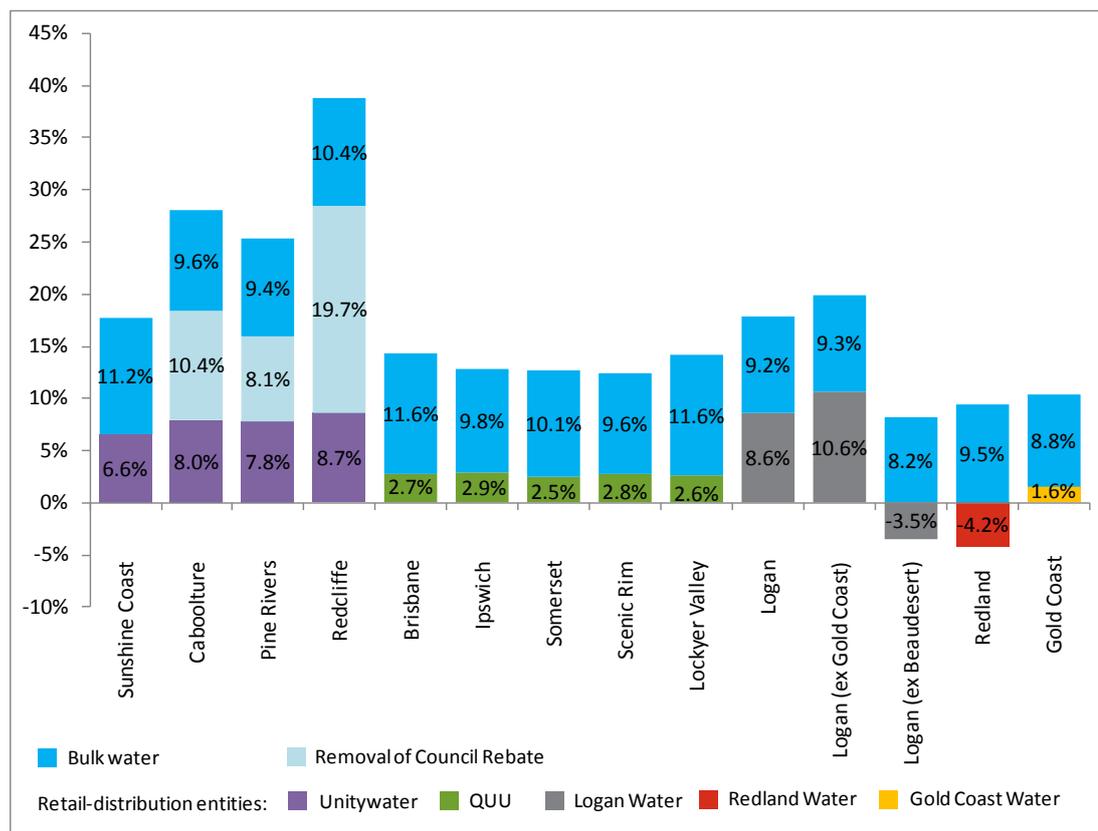
**Figure 2 Residential bills (\$ per year)**



*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.*

In response to comments made by several water retailers on the Draft Report, the QCA has provided additional information on the change in residential bills across SEQ by retail and distribution, council rebate, and bulk water (including the expiry of the bulk water rebate) drivers.

**Figure 3 Change in residential bills (by retail and bulk drivers)**



Note: Bulk water includes the impact of the expiry of the bulk water rebate. Source: QCA calculations.

## 2.4 Other bills

In its submission, the Queensland Council of Social Service (QCROSS, 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. QCROSS submitted 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 considers that, going forward, Logan Water should consult with QCROSS 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

QCROSS (2013) also submitted 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) QCROSS submitted the QCA could be tasked to collect and publish statistics on incidence and trends in hardship, complaints and disconnections (as it does for electricity).

Logan City Council has information on its website about payment plans for customers in financial difficulties. Stakeholder engagement by Logan Water has included consultation on Part A of its Water Netserv Plan<sup>16</sup>.

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.

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<sup>16</sup> Water Netserv Plans are a requirement of the DR Act, s 99BJ.

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## 3 DEMAND

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### 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

#### Residential and non-residential

Logan Water forecast total water demand for 2013-14 by applying a growth rate of 1.25% (assumed to be evenly distributed across the year) to estimated water purchases in 2012-13. However, Logan Water has made adjustments to this forecast to account for:

- (a) a 3% reduction in demand in 2013-14 as the dry weather in 2012-13 is not expected to continue and average conditions are assumed for 2013-14
- (b) unaccounted water, budgeted at around 6% of total water purchased
- (c) standpipe water sales.

In total, Logan Water has forecast a fractional decrease (-0.03%) in water volumes in 2013-14.

For 2014-15, Logan Water calculated that total water purchases would increase by 1.76%, due to growth in connections and consumption per connection.

#### Connections

Logan Water has applied a 1.25% annual growth to residential and non-residential connections from July 2013 onwards. However, due to slower growth from July 2012 to June 2013, the average number of connections in 2013-14 is forecast to be 1.06% higher than the average in 2012-13.

Logan Water's residential and non-residential connection growth rates in 2014-15 are both 1.25%.

The QCA notes that the growth rate assumed by Logan Water is lower than that forecasted by the Office of Economic and Statistical Research (OESR) (2.1%). 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.

However, 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.

Logan Water has not demonstrated that its growth rate is based on recent (actual) data. Therefore, the QCA has applied the growth rate that corresponds with the OESR's low population series.

**Table 3 Forecast growth in water connections**

	<b>2013-14</b>	<b>2014-15</b>
Logan Water	1.25%	1.25%
OESR	2.1%	2.1%

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

**Table 4 Residential and non-residential average water connections**

	<b>2012-13</b>	<b>2013-14</b>				<b>2014-15</b>			
		<b>Logan Water</b>		<b>QCA</b>		<b>Logan Water</b>		<b>QCA</b>	
		<b>Growth Rate</b>	<b>#</b>						
Residential	90,713	1.07%	91,685	1.50%	92,072	1.25%	92,831	2.10%	94,006
Non-residential	5,053	0.93%	5,101	1.36%	5,122	1.25%	5,164	2.10%	5,230
<b>Total</b>	<b>95,766</b>	<b>1.06%</b>	<b>96,786</b>	<b>1.49%</b>	<b>97,195</b>	<b>1.25%</b>	<b>97,996</b>	<b>2.10%</b>	<b>99,236</b>

Note: Average connections represent connection as at December. Source: LW (2013b), LW supporting information (2013), LW's subsequent emails, QCA calculations.

### Consumption per connection

Logan stated that average consumption (l/p/d) is not used for short term forecasting, and is only used for information from a total (residential and non-residential) consumption perspective.

Nevertheless, for comparison purposes, the QCA has reviewed Logan Water's supporting information, and calculated Logan Water's l/p/d for residential sector.

Table 5 presents Logan Water's occupancy rate and water demand and the QCA's calculation of Logan Water's average residential consumption.

**Table 5 Logan Water forecast water volume**

	2012-13	2013-14		2014-15	
		Growth Rate	#	Growth Rate	#
Water Demand (ML)					
Residential	15,098	2.1%	15,411	1.8%	15,683
Non-residential	3,565	2.1%	3,638	1.8%	3,703
Standpipes	165	-53.3%*	77	1.3%	78
<b>Total</b>	<b>18,828</b>	<b>1.6%</b>	<b>19,126</b>	<b>1.8%</b>	<b>19,463</b>
Occupancy rate					
Residential and non-residential	2.88	0%	2.88	0%	2.88
Average consumption (l/p/d)					
Residential	159	1.0%	160	0.3%	161

Note: \*a reduction in standpipe usage is due to 2012-13 extreme dry conditions not expected to continue into the future. Source: LW (2013b), LW supporting information (2013), QCA calculations.

In 2012-13 review, SKM confirmed its view that rebound will occur over a four to five-year period and settle at around the 200 l/p/d voluntary target for SEQ residential sector as a whole (Target 200) (SKM 2013). The QCA accepted SKM's approach.

Recent data highlights that SEQ residents have continued to maintain water consumption below 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 (l/p/d), the QCA used Logan Water's total residential volume, total residential connections and an assumption on occupancy rate. The QCA occupancy rate in 2012-13 is 2.65 (as per OESR's advised interpolation method) and is lower than Logan's occupancy rate of 2.88. This results in the QCA's higher average base consumption in 2012-13. The QCA occupancy rates then fall slightly (2.63 and 2.62 in 2013-14 and 2014-15).

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 results in a 0.3% growth in average consumption, compared to Logan Water's growth of 1% and 0.3%. As in previous reviews, the QCA considers that price elasticity should be explicitly included in demand forecasting once the estimated level of rebound is achieved.

Following this approach, the QCA's estimate of average consumption in 2013-14 and 2014-15 for the residential sector is 173.5 and 173.9 l/p/d, respectively. The QCA applied this average consumption to its estimate of connections and occupancy rate to arrive at water demand.

In relation to non-residential demand, the QCA has used average consumption per connection as the basis of its forecasts. 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 Logan 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 6 QCA forecast water volume**

	2012-13	2013-14		2014-15	
		Growth Rate	#	Growth Rate	#
Average consumption (litres per person per day)					
Residential	173.0	0.3%	173.5	0.3%	173.9
Average consumption (kilolitres per connection per annum)					
Non-residential	705.5	0.3%	707.4	0.3%	709.3
Residential Connected Population					
Residential average occupancy rate	2.64	-0.4%	2.63	-0.4%	2.62
Residential connected population	239,125	1.1%	241,830	1.7%	246,011
Water Demand (ML)					
Residential	15,098	1.4%	15,310	2.0%	15,618
Non-residential	3,565	1.6%	3,623	2.4%	3,709
Standpipes	165	-53.4%	77	0.0%	77
<b>Total</b>	<b>18,828</b>	<b>1.0%</b>	<b>19,011</b>	<b>2.1%</b>	<b>19,404</b>

Source: QCA calculations.

### Non-revenue water

Logan Water estimated non-revenue water to be around 6% in 2013-14.

The QCA notes that this is significantly lower than that of QUU and Unitywater's loss factor, and reflects Logan Water's newer infrastructure. The QCA accepts Logan Water's proposed loss factor and has applied it to estimate non-revenue water.

**Table 7 Non-revenue water**

	2012-13	2013-14		2014-15	
		Logan Water	QCA	Logan Water	QCA
Loss %					
Total		6%	6%	6%	6%
Non-revenue Water (ML)					
Total	1,525	1,221	1,141	1,242	1,164

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

### 3.3 Bulk water forecasts

Bulk water demand forecasts are the sum of residential, non-residential and non-revenue water. As noted above, Logan Water forecast a fall in water demand in 2013-14 as the dry weather in 2012-13 is not expected to continue and average conditions are assumed for 2013-14.

The QCA's forecasts of bulk water are slightly lower than Logan Water's, largely due to lower growth in average consumption and a fall in occupancy rate which results in a lower water demand.

**Table 8 Bulk water forecasts (ML)**

	2012-13	2013-14		2014-15	
		Logan Water	QCA	Logan Water	QCA
Total	20,353	20,347	20,151	20,705	20,568

Source: LW (2013b), LW supporting information (2013), QCA calculations.

### 3.4 Sewerage

#### Residential and non-residential

Logan Water charges a fixed fee for connection to its sewerage network.

As for water, Logan Water has applied a 1.25% annual growth to residential and non-residential sewerage connections from July 2013 onwards. However, the average number of connections in 2013-14 is forecast to be 1.14% higher than the average in 2012-13.

Logan Water's residential and non-residential sewerage connection growth rates in 2014-15 are both 1.25%.

As for water, the QCA has applied the growth rate that corresponds with the OESR's low population series.

**Table 9 Residential and non-residential average wastewater connections**

	2012-13	2013-14				2014-15			
		Logan Water		QCA		Logan Water		QCA	
		Growth Rate	#	Growth Rate	#	Growth Rate	#	Growth Rate	#
Residential	80,924	1.2%	81,855	1.1%	82,200	1.25%	82,878	2.1%	83,926
Non-residential	4,433	1.0%	4,478	1.1%	4,497	1.25%	4,534	2.1%	4,591
<b>Total</b>	<b>85,357</b>	<b>1.1%</b>	<b>86,333</b>	<b>1.1%</b>	<b>86,697</b>	<b>1.25%</b>	<b>87,412</b>	<b>2.1%</b>	<b>88,518</b>

Note: Average connections represent connections as at December. Source: LW (2013b), LW supporting information (2013), LW's subsequent emails, QCA calculations.

### 3.5 Demand for capital planning

#### Logan Water's submission

To plan capital expenditure programs, Logan Water used projected population, the requirements of the planning scheme, level of residential versus non-residential customers and estimated consumption. Logan Water submitted that reduction in usage levels have had a

major bearing in water network augmentation going forward, with many anticipated capital projects being delayed by a number of years. The process undertaken by Logan Water to estimate demand for capital planning purposes is broadly in line with that undertaken by the other water businesses.

The introduction of the SEQ Water Supply and Sewerage Design and Construction Code (Design and Construction Code) has influenced the level of demand to be taken into account in planning future infrastructure. Logan Water's capital planning standard employs the parameters set out in the Design and Construction Code.

### QCA's analysis

The QCA notes that Logan 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, Logan Water's methodology to forecast demand for 2013-15 is reasonable. Nevertheless, the QCA has made some adjustments to reflect its view of lower growth of average consumption. Overall, the QCA's estimates of the demand for bulk water are only slightly lower than Logan Water's.

As in the previous price reviews, the QCA considers that price elasticity should be explicitly included in demand forecasting once the estimated level of rebound is achieved. As stated in previous years, it is considered appropriate to develop and compare different approaches to demand forecasting for future use in SEQ and in doing so be cognisant of their benefits and costs.

## 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

Logan Water stated that information on the RAB as at 1 July 2010 is not available for Logan City Council. Logan Water provided a starting RAB based on the value of assets transferred back from Allconnex on 1 July 2012.

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, the QCA provided estimates by district, product and asset class as at 1 July 2010. The QCA has therefore established its MAR on this basis.

Due to timing and methodological differences, the QCA RAB value as at 1 July 2010 is lower than Logan Water's submitted value as at 1 July 2012. The QCA RAB value as at 1 July 2012 is compared with the Logan Water value as at 1 July 2012 in section 4.12 below.

**Table 10 QCA RAB as at 1 July 2010 (\$m)**

<i>Council</i>	<i>Water</i>	<i>Sewerage</i>	<i>RAB</i>
Logan	505.39	622.58	1,127.98

*Source: QCA calculations.*

### 4.4 Capital expenditure in 2010-13

#### Logan Water Alliance

The Logan Water Alliance, established by Logan City Council in 2009, is a joint venture between Logan City Council and Tenix Australia, with Cardno and Parsons Brinkerhoff as sub-alliance partners to Tenix (SKM 2014). The alliance was established to deliver a \$200 million capital works program over a three to four-year period. Logan City Council deemed the Logan Water Alliance an appropriate vehicle to deliver the significant infrastructure, planning and capital works program that was facing the new council area following the transfer of areas of land from

the Gold Coast City Council and the (former) Beaudesert Shire Council as part of local government structural reforms in 2008. This included the future regional cities of Flagstone and Yarrabilba.<sup>17</sup>

The term of the Logan Water Alliance Program Alliance Agreement is three years with provision for annual extensions for a further two years.<sup>18</sup> The alliance operates under a contract which includes performance based pain and gain share payments.<sup>19</sup>

In its 2011-12 review, the QCA found that Allconnex's Alliance Program Management Wastewater costs - that is, costs associated with the Logan Water Alliance - of \$3.9 million in 2011-12 were prudent and efficient. The QCA's review drew significantly on an independent review of the Logan Water Alliance, conducted for Allconnex by Evans and Peck in 2011 (QCA 2012a).

In 2012-13, the Logan Water Alliance delivered 83% of Logan Water's capital program (SKM 2014).

### Ministerial Directions

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

Logan Water did not report capital expenditure for 2010-12. Logan Water did report on capital expenditure for 2012-13 as part of its 2013-15 submission.

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

On this basis, the capital expenditure in the Logan area for 2010-13 is shown in Table 11 below.

**Table 11 Logan Water capital expenditure 2010-13 (\$m)**

<i>Council</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Logan	83.98	96.64	44.28

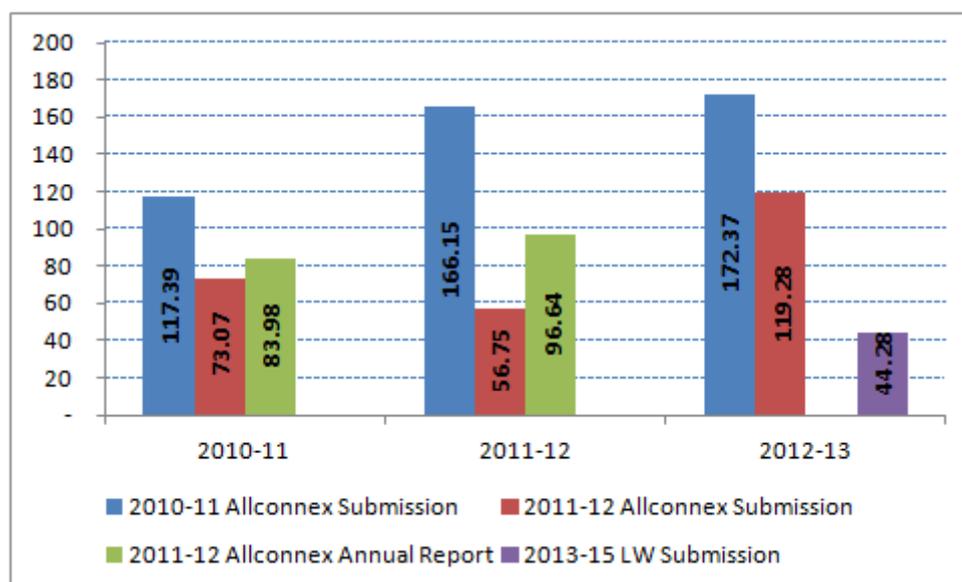
*Note: Includes contributed, donated and gifted assets. Source: Allconnex (2012) and LW (2013b).*

Changes in Logan's capital expenditure forecasts since 2010-11 are shown in Figure 4 below.

<sup>17</sup> Refer to the SEQ Regional Plan for further information.

<sup>18</sup> QCA (2012a).

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

**Figure 4 Capital expenditure estimates in submissions (\$m)**

Source: Allconnex (2010), Allconnex (2011), Allconnex (2012), LW (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.

### Logan Water's forecast capital expenditure for 2013-15

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

**Table 12 Logan Water capital expenditure 2013 to 2015 (\$m)**

	2013-14	2014-15	Total
Water	21.83	24.03	45.86
Sewerage	31.21	135.86	167.07
<b>Total</b>	<b>53.04</b>	<b>159.89</b>	<b>212.93</b>

Note: Includes contributed, donated and gifted assets. Capital expenditure as commissioned. Source: LW (2013b).

**Table 13 Logan Water forecast capital expenditure 2013 to 2015 (drivers) (\$m)**

<i>Capital expenditure driver</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Growth	5.62	67.58	73.20
Renewal	22.76	36.33	59.09
Improvement	8.02	39.18	47.20
Compliance	2.31	2.80	5.11
Contributed Assets	14.33	14.00	28.33
<b>Total</b>	<b>53.04</b>	<b>159.89</b>	<b>212.93</b>

*Note: Capital expenditure as-commissioned. Source: LW (2013b).*

Logan Water submitted that it is forecasting approximately \$457 million in water and sewerage infrastructure investment up to 2021-22 to support growth in the council area.

### QCA's approach

The QCA has considered the prudence and efficiency of Logan 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.

### Prudence and efficiency criteria

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

- (a) prudence, 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 Logan City Council's, Logan Water's and Logan Water Alliance'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 (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>20</sup>

The sample of Logan Water projects reviewed in detail is shown in Table 14 below. Logan Water's sample accounted for 25.9% of its commissioned capital expenditure for 2013-15, excluding contributed assets. SKM reviewed the capital expenditure on an as-incurred basis, as this reveals the annual expenditure stream over the life of the project.

**Table 14 Logan 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. Chambers Flat Road Pump Station to Princess Street Marsden Wastewater Conveyance	Renewals / Growth / Improvement <sup>21</sup>	17.37	17.37
2. New Beith SRWP to Round Mountain Reservoir Water Conveyance	Growth	7.42	7.42
3. Water Reticulation Main Replacement	Renewals	7.06	7.06
4. Crestmead Trunk Main Augmentation	Growth	6.23	6.23
5. Sewerage Pump Station (SPS)108 Rising Main Augmentation	Renewals / Growth <sup>22</sup>	5.79	5.79
6. Logan East PLMP and Fire Flow Project	Renewals	3.95	3.95
<b>Total sampled expenditure</b>		<b>47.82</b>	<b>47.82</b>
<b>Total capital expenditure (excluding contributed assets)</b>		<b>184.60</b>	<b>184.60</b>

*Note: Table may not add due to rounding. Source: LW supporting information (September 2013).*

<sup>20</sup> The Alfred Street Wastewater Pump Station (WWPS) to Loganholme Water Pollution Control Centre (WPCC) Rising Main Augmentation project was reviewed by the QCA in 2011-12 and found to be prudent and efficient (QCA 2012a). Accordingly, the QCA excluded the Alfred Street to Loganholme WPCC Rising Main Augmentation project (\$27.66m in 2013-14) and the Loganholme WPCC, Inlet Works and Bypass project (\$12.44m in 2013-14) from the sample after LW confirmed the projects were a continuation of the previous project (LW supporting information (2013)).

<sup>21</sup> Renewals 50%; growth 30%; improvement 20% (LW 2013b).

<sup>22</sup> Renewals 86%; growth 14% (LW 2013b).

## 4.6 Prudency and efficiency of sampled projects

### 4.6.1 Chambers Flat Road pump station to Princess Street Marsden wastewater conveyance

#### Background

The Chambers Flat Road Pump Station to Princess Street Marsden Wastewater Conveyance project involves the design and construction of a new sewerage pump station at Chambers Flat Road and approximately 3km of rising and gravity mains to Princess Street.

This is the final project in the Logan Village to Kingston Wastewater Conveyance Strategy program. The objective of the strategy is to provide sufficient sewerage conveyance capacity to meet the growth needs in Park Ridge East and Logan Village. The two projects previously completed are the Logan Village to Chambers Flat Conveyance Project and the School Road to Chambers Flat Conveyance Project.

The catchment of the Chambers Flat pump station has grown significantly in recent times due to construction of new infrastructure which connects new developments and growth areas to the pump station. The existing infrastructure was not sized to cater for this growth; hence the likelihood of operational difficulties will increase if the infrastructure is not augmented. Significant future growth has also been identified in the catchment, which will exacerbate hydraulic capacity issues. Failure to increase to hydraulic capacity in this network will lead to an increased risk of:

- (a) uncontrolled sewerage spills
- (b) possible dry weather spills in the event of asset failure
- (c) public health and safety incidents
- (d) environmental harm.

Logan Water submitted that the expenditure incurred on the project would be \$17.37 million in 2013-15.

#### Prudency

SKM stated growth and improvement were (respectively) the primary and secondary drivers of the project. Logan Water's data template identified renewals (50%), growth (30%) and improvement (20%) as the project drivers. SKM considered that growth and improvement are appropriate drivers for the project given the anticipated growth in the catchment and the operational issues in the current main.

SKM considered that an appropriate options evaluation process had been undertaken and the scope of work is appropriate for the purpose described.

SKM found the project to be prudent.

#### Efficiency

The standards used for the project were based on the 'Logan Water Alliance's Review of Desired Standards of Service' (DSS) (2010). SKM reviewed the DSS against the Design and Construction Code and concluded that the DSS were appropriate and generally in line with the Design and Construction Code.

SKM developed a cost estimate for components of the rising main, gravity main and pump station elements of the project, based on rates from the 'Logan Water Alliance Priority Infrastructure Plan Unit Rates Report' (March 2011) (unit rates report) and unit rates from

recent projects. SKM's estimate was approximately 22% lower than Logan Water's; SKM considered that the costs proposed by Logan Water were acceptable given the lack of additional contingency allowance and low on-costs in the Logan Water estimate.

SKM found the project to be efficient.

#### Policies and procedures

SKM found that Logan Water did not apply a standardised approach to cost estimating for this project, and there was no evidence of an implementation strategy. In terms of the absence of an implementation strategy, SKM stated that the project can be delivered within the 2014-15 financial year and noted that Logan Water is undertaking a review of how projects will be delivered in 2014-15 onwards.

#### 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 Chambers Flat Road Pump Station to Princess Street Marsden Wastewater Conveyance (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	0.00	6.21	11.16	17.37
SKM Adjustment	0.00	0.00	0.00	0.00
QCA	0.00	6.21	11.16	17.37

*Note: Capital expenditure as-incurred. Source: SKM (2014).*

### 4.6.2 New Beith SRWP to Round Mountain Reservoir water conveyance

#### Background

Round Mountain Reservoir provides storage to service growth within the Greater Flagstone Urban Development Area<sup>23</sup> (UDA) and is able to provide a complimentary supply into the clear water tanks at the South Maclean Water Treatment Plant (WTP)<sup>24</sup>. To increase the supply capacity from the Southern Regional Water Pipeline (SRWP)<sup>25</sup> into the Round Mountain Reservoir, the construction of a new dedicated trunk main between the SRWP's Beaudesert (New Beith) offtake and the inlet valve chamber of the New Beith Road connection main is required.

The project scope includes the design and construction of 3.65km of trunk main along New Beith Road and Pub Lane from the Round Mountain Reservoir to the SRWP offtake.

In February 2012, Allconnex's prudence and efficiency review of the project estimated the cost to be \$6.78 million from 2012-13 to 2014-15 (refer to section 4.8 for more information on Allconnex's application of prudence and efficiency principles to capital planning).

Logan Water submitted that the expenditure incurred on the project would be \$7.42 million in 2013-15. A further \$0.41 million was incurred in 2012-13.

<sup>23</sup> Refer to SEQ Regional Plan and DSDIP website for further information (<http://www.dsdiq.qld.gov.au>).

<sup>24</sup> The South Maclean WTP is owned and operated by Seqwater (<http://www.seqwater.com.au>).

<sup>25</sup> The 94km SRWP is owned by Seqwater and links the Brisbane, the Gold Coast, Logan, Ipswich and the Scenic Rim council areas (<http://www.seqwater.com.au>).

## Prudency

In May 2012, the (then) Queensland Water Commission (QWC) finalised an investigation into water supply options for the stand-alone communities of Beaudesert and Canungra in Scenic Rim Regional Council (SRRC). Based on the QWC report, two options are being considered: upgrade of the Helen Street WTP; or connecting SRRC to the SEQ water grid through a combination of bulk and trunk assets (owned by Logan City Council and Seqwater) and new assets constructed by Seqwater. Seqwater is preparing a business case for the supply solution for SRRC, with the aims of finalising the design of the recommended solution in 2014-15 and construction in 2015-16.<sup>26</sup>

The Logan Water Alliance has assisted Seqwater through undertaking the 'Revision of Logan South Water Supply Servicing Strategy (90-12-20)' (Logan South Strategy).<sup>27</sup> The Logan South Strategy identified significant deferral of trunk main augmentations by supplying the Yarrabilba area with bulk water from the SRWP via the Round Mountain Reservoir. The revised strategy deferred construction of the Chambers Flat Trunk Main, a \$29 million trunk main connecting the SRWP to the Travis Road Reservoir, from 2016 to 2021. This approach requires the availability of the New Beith Road Trunk Main by 2015-16 (SKM 2014).

SKM concluded that on a local and regional level, the project was prudent.

However, the QCA notes that, subsequent to the project being included in the review sample for 2013-15 on the basis that it was scheduled for completion in June 2015, Logan Water revised the commissioning date to June 2016. Accordingly, the QCA considers that the costs incurred for the project in 2013-15 should be removed from Logan Water's RAB.

In December 2013, Logan Water advised the QCA that the project was not included in the RAB it submitted and that, accordingly, the QCA should not remove it from the RAB for the review period. The QCA notes that this project was chosen for detailed review on the basis of preliminary information provided by Logan Water on the capital expenditure data underpinning pricing. On the basis of this information, the QCA chose its sample for detailed review and advised Logan Water.

In its Draft Report, the QCA stated that, pending information from Logan Water that reconciles the project information provided for sampling with the information return sheets 5.6.2 (list of projects) and 5.6.1 (commissioned capital expenditure), the QCA can only rely on the information provided to it and make adjustments on the basis of its judgment and available information.

In its submission on the Draft Report, Logan Water re-stated the New Beith Road Trunk Main's amended completion date of June 2016. Further, Logan Water advised that, as the project was not included in capital expenditure completion information provided in the data template for the period 2013-15, it believed the amount should not be deducted from the RAB (Logan Water 2014).

The QCA notes that the project was included in the commissioned capital expenditure sheet of Logan Water's information return, with \$7.42 million expenditure budgeted for 2014-15. In the absence of a reconciliation by Logan Water of the information provided for sampling with the information return sheets 5.6.2 and 5.6.1, the QCA cannot be certain that the 2014-15 expenditure was not included in Logan Water's capital expenditure for 2013-15.

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

<sup>27</sup> The strategy was scheduled for completion in December 2013 and was not available for SKM's review.

Further, the QCA notes that Logan Water has not submitted that the amount (\$6.23 million) for the Crestmead Trunk Main Augmentation project (refer to section 4.6.4 below) should similarly not be deducted from the RAB on account of it also being deferred past 30 June 2015. As with the New Beith Road project, the Crestmead project was included in the sample of six capital expenditure projects on the basis that it would be commissioned in 2013-15.

Logan Water's data return (sheet 5.6.2) included the Crestmead project; the expenditure was budgeted for 2014-15 and commissioning scheduled for June 2016. Based on the information provided by Logan Water, the QCA is unable to distinguish between the New Beith and Crestmead projects in terms of the New Beith project being excluded from Logan Water's submitted commissioned capital expenditure and the Crestmead project being included in commissioned capital expenditure.

### Efficiency

Logan Water considered a number of short and longer term options for the Round Mountain Reservoir WSZ. The outcomes of the options assessment indicated that, unless Wyaralong WTP is constructed prior to the existing network reaching capacity (between 2013 and 2018), New Beith Road Trunk Main will be required.<sup>28</sup> SKM was satisfied that an appropriate range of options were selected and adequately reviewed, that the most efficient option had been selected and that the scope of works was appropriate to meet the project need.

SKM found that the project was efficient.

### Policies and procedures

SKM found that Logan Water did not consider alternative investments, substitution possibilities between operating and capital costs, and non-network alternatives such as demand management in planning the project. SKM also reported that Logan Water did not apply a standardised approach to cost estimating for this project, and there was no evidence of an implementation strategy.

### Conclusion

Following consideration of Logan Water's submissions on the Draft Report as outlined above, the QCA has removed project costs for the review period, but not those incurred in 2012-13 as these are outside the scope of the review, as shown in Table 16 below.

**Table 16 New Beith SRWP to Round Mountain Reservoir Water Conveyance (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	0.41	0.00	7.42	7.83
QCA Adjustment	0.00	0.00	-7.42	-7.42
QCA	0.41	0.00	0.00	0.41

*Note: Capital expenditure as-incurred. Source: SKM (2014).*

<sup>28</sup> In September 2012, DEWS published the Regional Water Security Program for SEQ - Version 2 (RWSP) under the *Water Act 2000* (Qld) (Water Act), s 360M(1)(b) (DEWS 2012). The program removed the obligation to build: (i) the Wyaralong WTP; (ii) the bulk water pipeline from the Wyaralong WTP to the SRWP; and (iii) the bulk water pipeline from the SRWP to the Karawatha Reservoir. The RWSP is no longer required under the Water Act; s 350 of the Water Act requires Seqwater to prepare a Water Security Program for SEQ. This program is expected to be submitted to DEWS by August 2015 (Seqwater 2013).

### 4.6.3 Water reticulation main replacement

#### Background

The Water Reticulation Main Replacement Program is an annual program for the replacement of DN100 and DN150 water pipes. The objective of the program is to improve service continuity by extending the life of the asset group and reduce unplanned water interruptions.

Projects are prioritised through consideration of historical failures, visual condition inspection, failure consequence, and operational issues. The water supply pipes constructed from 1960s to 1980s - which have a useful life of 60 years - are ageing and some will require replacement over the next 10 years. In addition, some of the pipes constructed with 'white PVC' in the 1990s are experiencing poor performance and maintenance difficulties; these will also require replacement over the next 10 years.<sup>29</sup>

The scope of works planned for delivery in 2013-14 includes the replacement of approximately 4.3km of 80mm to 150mm water mains. The scope of works planned for delivery in 2014-15 had not been finalised at the time of SKM's review but was anticipated to include the replacement of approximately 10km of water mains.

Logan Water submitted that the expenditure (as-incurred) on the project would be \$7.06 million in 2013-15. A further \$2.75 million was incurred in 2012-13.

#### Prudence

Logan Water nominated renewals as the project driver. SKM considered that renewal was the appropriate driver for the project as failure to replace the mains could result in service interruptions and income loss through leakage.

SKM found that the process used for the identification and prioritisation of water mains to be included in the program of works was appropriate as it is based upon a consideration of risk and condition and, as such, was in line with good asset management practice. However, SKM noted that no evidence of the implementation of the process had been provided by Logan Water.

SKM concluded that the project was prudent.

#### Efficiency

SKM developed a cost estimate for the 2013-14 program based on the 2012-13 and 2013-14 program costs, and also compared Logan Water's tendered unit rates with those of Gold Coast Water's Water Main Renewal Program.<sup>30</sup> SKM found Logan Water's unit rates were reasonable.

Further, SKM considered that the development of cost estimates based on unit rates from historical delivery of the program was acceptable. In addition, as the construction works will be awarded through a competitive tender process, they will be market tested. SKM therefore concluded that the budget for the 2013-14 program was generally efficient, but considered a 5% reduction to account for high on-costs. However, as the SKM estimate (\$2.064 million) was higher than the value originally submitted by Logan Water (\$2.058 million) in its data template, SKM proposed that the lower Logan Water value be retained.

Logan Water has assumed a 20% increase in contract rates in future years. For 2014-15, SKM proposed that, as no supporting information had been provided to account for the assumed 20% increase in contract rates, the increase in contract rates should be removed. SKM's

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<sup>29</sup> LW supporting information (2013).

<sup>30</sup> Refer to QCA (2014 GCW), section 4.6.3.

estimate of program costs was \$3.78 million; accordingly, SKM proposed a reduction of \$1.22 million to Logan Water's 2014-15 budget of \$5.00 million.

#### Policies and procedures

SKM found that Logan Water did not apply a standardised approach to cost estimating for this project, there was no evidence of an implementation strategy, and did not apply a toll gate or gateway review process.

#### Conclusion

On the basis of SKM's advice, the QCA accepts that the project is prudent and an adjustment should be made for contract rates in 2014-15, as shown in Table 17 below.

**Table 17 Water Reticulation Main Replacement (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	2.75	2.06	5.00	9.81
SKM Adjustment	0.00	0.00	-1.22	-1.22
QCA	2.75	2.06	3.78	8.59

*Note: Capital expenditure as-incurred. Source: SKM (2014).*

#### 4.6.4 Crestmead trunk main augmentation

##### Background

The SEQ Regional Plan identified several areas in Logan City contained that could accommodate future urban communities, and other localities that, subject to further planning, could accommodate additional long-term development (DIP 2009). These areas are located along the south western corridor, between the existing urban area of Logan and the southern boundary of Logan City.

Included in the areas identified for further growth is Park Ridge (DIP 2009). There is minimal existing sewerage infrastructure within Park Ridge. There are two areas which are currently serviced, being an existing commercial precinct adjacent to Mount Lindesay Highway in the north western corner of the Major Development Area (MDA), and a retirement resort located in the east of the Park Ridge MDA.

The Crestmead Trunk Main Augmentation forms part of the (draft) Northern Park Ridge Servicing Strategy which involves the construction of one section of a wastewater conveyance system on the northern boundary of Park Ridge. The project involves the construction of approximately 3km of trunk main between Bumstead Road and Chambers Flat Road Pump Station, via Billabong Drive, Crestmead.

Logan Water submitted that the expenditure (as-incurred) on the project would be \$6.23 million in 2014-15. However, in September 2013, the Logan Water Alliance identified that the downward revision of forecast growth for Park Ridge and other contributing catchments meant the project could be deferred until at least 2023.

##### Prudency

Logan Water identified growth as the primary driver for this project.

SKM considered that, although growth will ultimately be the appropriate driver for this project, given the revised timing of developments within the catchment, the project is not currently needed.

### Efficiency

As the project is anticipated to be deferred until 2023, SKM proposed the removal of the project expenditure from the current review period.

### Policies and procedures

The QCA considers that a policies and procedures review of the project is not warranted, given its postponement until 2023.

### Conclusion

On the basis of SKM's advice, the QCA considers that the costs of this project should be removed from Logan Water's RAB, as per Table 18 below.

**Table 18 Crestmead Trunk Main Augmentation (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	N/A	0.00	6.23	6.23
SKM Adjustment	N/A	0.00	-6.23	-6.23
QCA	N/A	0.00	0.00	0.00

*Note: Capital expenditure as-incurred in the year before commissioning. Source: QCA calculations.*

## 4.6.5 SPS108 rising main augmentation

### Background

The project involves the diversion of the Church Road Pump Station (SPS108) to the new Alfred Street Pump Station (SPS69) rising main via a proposed rising main. The objective of the project is to increase conveyance capacity in the network between SPS108 and SPS134 to cater for growth, while maintaining levels of service.

Logan Water submitted that the expenditure (as-incurred) on the project would be \$5.79 million in 2013-15.

### Prudency

SKM stated growth and renewal were, respectively, the primary and secondary drivers of the project. Logan Water's data template identified renewals (86%) and growth (14%) as the project drivers. SKM considered that growth was the appropriate driver for the project as it will increase conveyance capacity in the network between SPS108 to cater for projected growth.

SKM concluded that the project will be completed and commissioned within the review period. Further, SKM considered that the standards used for this project were appropriate given they were the adopted standards at the time of design.

SKM concluded that the project was prudent.

### Efficiency

Whilst the on-costs on the project (21%) are higher than SKM's on-costs (12-20%), SKM recognised that the significant design (and re-design) work undertaken for this project had resulted in a lower-cost solution, and a better financial outcome, for the project overall. As such, SKM did not propose a further reduction of on-costs for this project.

### Policies and procedures

SKM found that Logan Water did not apply a standardised approach to cost estimating for this project: the unit rates report outlines a methodology for cost estimation including

recommended percentages for owner's costs and contingencies. SKM found that the values used for this project were higher than those in the unit rates report.

SKM also found there was no evidence of an implementation strategy. However, SKM noted that Logan Water is undertaking a review of how projects will be delivered in 2014-15 onwards.

### Conclusion

Table 19 below shows the expenditure profile for this program.

**Table 19 SPS108 Rising Main Augmentation (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	0.00	1.09	4.70	5.79
SKM Adjustment	0.00	0.00	0.00	0.00
QCA	0.00	1.09	4.70	5.79

*Note: Capital expenditure as-incurred in the year before commissioning. Source: SKM (2014).*

## 4.6.6 Logan East PLMP and fire flow project

### Background

The objective of this project is to address the monitoring and pressure management control systems failures across Logan East which has resulted in excessive pressures at various locations and below standard fire flow in other areas. This project will establish 12 district metered areas (DMAs) to provide improved services and compliance with the DSS.

The project includes approximately 1.6km of DMA water main augmentations and 0.7km of fire flow augmentations. The project also includes new telemetry, meters, and pressure reducing valve controls at 15 DMA inlet structures across Logan East.

Logan Water submitted that the expenditure (as-incurred) on the project would be \$3.95 million in 2013-15.

### Prudence

SKM stated improvement and compliance were, respectively, the primary and secondary drivers of the project. Logan Water's data template identified renewals as the project driver. SKM considered that improvement and compliance were the appropriate drivers for the project given that the existing flow monitoring system was not maintained and is no longer operational, and given that sections of the network are not meeting fire flow requirements specified in the Design and Construction Code.

In addition, the project should result in savings of \$464,000 per year from reduced water losses (\$396,000) and reduction in burst repairs (\$68,000). SKM considered that an appropriate options evaluation process has been undertaken and the scope of work is appropriate for the purpose described. As such SKM concluded that the project was prudent.

SKM determined that the project is prudent.

### Efficiency

SKM considered the allowances for the project's on-costs and contingency to be high. As such, SKM considered the on-cost allowance be reduced from 22.6% to 20% of the direct costs and the contingency allowance be reduced to 20% of the direct costs. However, as the SKM estimate (\$4.29 million) was higher than the value originally submitted by Logan Water

(\$3.95 million) in its data template, SKM proposed that the lower Logan Water value be retained.

#### Policies and procedures

SKM found that Logan Water did not apply a standardised approach to cost estimating for this project and there was no evidence of an implementation strategy.

#### Conclusion

Table 20 below shows the expenditure profile for the Logan East PLMP and Fire Flow Project.

**Table 20 Logan East PLMP and Fire Flow Project (\$m)**

	<i>Previous years</i>	<i>2013-14</i>	<i>2014-15</i>	<i>Total</i>
Logan Proposed	0.00	1.14	2.81	3.95
SKM Adjustment	0.00	0.00	0.00	0.00
QCA	0.00	1.14	2.81	3.95

*Note: Capital expenditure as-incurred. Source: SKM (2014).*

## 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 three projects, as per Table 21 below. The overall reduction of \$14.87 million (29.2% of the sampled projects) is predominantly due to a deferral of \$13.65 million for two projects that have been postponed until after 2013-15.

**Table 21 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>Logan</i>	<i>SKM / QCA</i>	<i>QCA</i>
1. Chambers Flat Road Pump Station to Princess Street Marsden Wastewater Conveyance	Yes	Yes	Prudent and efficient.	17.37	0.00	17.37
2. New Beith SRWP to Round Mountain Reservoir Water Conveyance	Yes	Yes	Prudent and efficient. Removed from RAB by QCA due to commissioning outside 2013-15.	7.83	-7.42	0.41
3. Water Reticulation Main Replacement	Yes	No	Reduction to reflect high on-costs and unjustified increase in contract rates.	9.81	-1.22	8.59
4. Crestmead Trunk Main Augmentation	No	No	Project deferred by LCC (through planning process) due to lack of growth.	6.23	-6.23	0.00
5. SPS108 Rising Main Augmentation	Yes	Yes	Prudent and efficient.	5.79	0.00	5.79
6. Logan East PLMP and Fire Flow Project	Yes	No	SKM estimate of project costs is higher than submitted by LW; lower number adopted.	3.95	0.00	3.95
<b>Total</b>				<b>50.99</b>	<b>-14.87</b>	<b>36.11</b>

\* Includes expenditure on projects incurred in 2012-13. Source: SKM (2013a). Table may not add due to rounding.

To translate the as-incurred adjustments of Logan Water's capital projects into as-commissioned adjustments, the QCA relied on Logan Water's data template. However, the template added as-incurred costs over the life of multi-year projects to calculate as-commissioned costs for capital projects. Given the overall reduction was \$14.87 million, the QCA does not consider this issue to have had a material impact on Logan Water's MAR.

The QCA suggests that Logan Water capitalise interest over the life of work in progress at the WACC to calculate the as-commissioned value (see QCA 2005 and ACG 2004).

The unit rates report proposes the use of a 20% for on-costs.<sup>31</sup> SKM reported that an "area of concern" in two of the six projects reviewed was a high value of on-costs<sup>32</sup> based on its project experience and review of on-costs for the other SEQ entities. SKM suggested a range of 12-20% should be adopted, according to complexity of the project and noted that its review of the sampled projects had proposed an average reduction to on-costs of 1.3%. SKM proposed a

<sup>31</sup> LW supporting information (2013).

<sup>32</sup> Refer to SKM (2014), section 5.4.

1.3% reduction to Logan Water's non-sampled capital expenditure projects for 2013-14 and 2014-15.<sup>33</sup>

The QCA notes that although two sampled projects had on-costs above 20%, two other sampled projects had on-costs below 12%, with the average on-costs for sampled projects lying within the 12-20%.range. The QCA has therefore not applied SKM's proposed savings to non-sampled projects.

## 4.8 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 22 below summarises the QCA's key findings from these reports.

**Table 22 Allconnex's capital planning - 2010 to 2012**

Year	QCA's capital planning findings
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 proposals 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 proposals 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 in the Logan East and South areas; and (b) the timing of these developments and supporting infrastructure would play a significant part in infrastructure planning.</p> <p>Allconnex stated that an external review of the efficiency of the Logan Water Alliance had been undertaken, recommendations of which were under consideration.<sup>34</sup></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

Logan Water submitted that strategic and master planning takes a long term view of Logan City's water and sewerage needs, providing the basis for future capital works programs for up to

<sup>33</sup> Refer to SKM (2014), section 5.4 (Table 48). The 1.3% is the average of SKM's proposed reduction in on-costs across the six sampled projects.

<sup>34</sup> Refer to QCA 2012a for details of the recommendations.

40 years. At the next level, catchment-based planning determines the most appropriate infrastructure solutions through options analysis; at this level, assumptions such as population growth, future land use, employment growth, development timing and resultant demand are confirmed by local and state planning documents. To ensure infrastructure investment decisions are not based solely on price, planning considerations include:

- (a) total water cycle management (TWCM) planning<sup>35</sup>
- (b) full-life cycle costs, sustainability and triple bottom line considerations
- (c) non-asset solutions
- (d) operational improvements
- (e) risk
- (f) maximising existing infrastructure life
- (g) flexibility in servicing strategies to provide for uncertainties (Logan Water 2013a).

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.

Most Logan Water capital projects continue to be carried out through the Logan Water Alliance (refer to section 4.4 above). SKM observed that the alliance project fee of 14% would have been reasonable in 2009 when the council entered into the contract but, "[d]ue to substantial changes in the market, this fee is now considered to be high". In August 2014, Logan City Council will relinquish its contract with the Logan Water Alliance; future capital works procurement and delivery is being considered by the council (SKM 2014).

SKM reviewed whether Logan Water's policies and procedures reflect good industry practice, drawing on the initiatives outlined in previous reviews and some new items:

- (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>36</sup> or similar
- (h) procurement and other delivery processes.

SKM's review is summarised below.

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<sup>35</sup> Developing LCC's TWCM plan (previously required under the Environmental Protection (Water) Policy 2009 (Qld)), is included in the Logan Rivers and Wetlands Recovery Program (<http://www.logan.qld.gov.au/>) (LCC 2013c).

<sup>36</sup> PAS-55 is published by the British Standards Institution.

### Standardised approach to cost estimating

Part D of a project's business case development in the 'Logan City Council Water Infrastructure Procedures for Capital Works Program Development' (August 2012) (capital works procedures) outlines the cost estimate for the project. The unit rates report sets out a standardised approach to cost estimating that SKM considered to be consistent with good industry practice. However the unit rates report is not referenced by the capital works procedures and hence does not outline when the method contained in the unit rates report is required to be used. As a result of this disconnect, SKM concluded that the procedures were not robust in this area.

Logan Water subsequently advised that unit rates, project owner's costs and contingency factors provided in the unit rates report are intended to be used to cost infrastructure at a strategic or master planning level. SKM acknowledged that the unit rates report states that, to "achieve greater accuracy when estimating the cost of infrastructure identified at the detailed planning or design level, it is recommended that a more detailed cost estimating approach be employed".

However, SKM notes that, for some projects at the detailed planning level or design level, a unit rates cost estimating method is used. Irrespective of this, SKM considered documenting procedures to be good practice to achieve consistent application. Therefore, SKM concluded there was merit in cross referencing the two documents relating to cost estimation, particularly as the procedural advice on not using unit rates at the detailed planning stage is contained in the unit rates report.

All projects are required to have summary documents prepared in accordance with a procedure for a Project Brief. SKM reported that the process was consistent with good industry practice and was robust.

### Gateway review

The 'Logan City Council Approval Process for Logan Water Alliance Work Packages' (May 2013) meets the requirement of a gated review process that SKM concluded was in keeping with good industry practice.

### Detailed analysis of options for major projects

Part C of a project's business case development requires a multi-criteria analysis of a range of options. SKM considered this met the requirements of good industry practice and was robust.

### Only includes only 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.

### Compliance

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

**Table 23 Logan Water compliance with legislation**

<i>Document</i>	<i>SKM Assessment</i>
Logan City Council Water Infrastructure Procedures for capital works program development Version 2 (August 2012)	Part B of a project's business case development requires documentation of the legislation that requires this project.
Water and Wastewater Planning & Reporting Framework - v2	Legislation referenced: <i>Water Supply (Safety and Reliability) Act 2008</i> (Qld); the DR Act, <i>Environmental Protection Act 1994</i> (Qld) and the <i>Sustainable Planning Act 2009</i> (Qld).
Environmental Legal and Other Requirements Overview Register	Legislation referenced: <i>Environmental Protection Act 1994</i> (Qld); <i>Plumbing and Drainage Act 2002</i> (Qld); <i>Public Health Act 2005</i> (Qld); the DR Act; <i>Sustainable Planning Act 2009</i> (Qld); <i>Water Supply (Safety and Reliability) Act 2008</i> (Qld); and the <i>Water Act 2000</i> (Qld).

Source: SKM (2014).

SKM concluded that the capital expenditure policies and procedures supplied met Logan Water's regulatory compliance requirement.

Further, Logan Water advised that, as part of its requirement to develop a Water Netserv Plan<sup>37</sup>, Logan City Council is developing a Business Management Framework (BMF) for the ongoing management of its commercial water business. This framework provides direct linkages to and supports council's corporate and organisational priorities and plans and will also replace the 'Water and Wastewater Planning & Reporting Framework' in ensuring council meets its ongoing compliance requirements.

The BMF will formalise and document Logan Water's services / business functions and how the business responds to legislation in general. Further, as Part of its Water Netserv Plan Part B, Logan Water is developing a range of management plans to align with the following focus areas:

- (a) safety
- (b) customer service excellence
- (c) financial and business efficiency
- (d) environmental responsibility
- (e) deliver and maintain assets
- (f) people

These focus areas relate to Logan Water's 'mandate' to provide safe, reliable and sustainable water and sewerage services for the benefit of the Logan community. This is one of the five purposes of Water Netserv Plans under the DR Act.<sup>38</sup>

#### Considers regional perspective

SKM noted that the DR Act requires SEQ service providers to prepare Water Netserv Plans by 1 March 2014<sup>39</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. SKM noted Logan City Council's draft Water Netserv Plan contained extensive

<sup>37</sup> DR Act, s 99BJ.

<sup>38</sup> Section 99BM.

<sup>39</sup> Section 99BJ.

description of coordinated regional planning in sections titled 'We need coordinated infrastructure to meet our growing needs' and 'Regional and local planning'. Further, the capital works procedures reference the draft Water Netserv Plan as a supporting document. SKM concluded that Logan Water's capital planning process complied with the regional perspective requirement.

Logan Water's annual operations report<sup>40</sup> for 2012-13 confirmed Logan City Council has met its obligation to prepare a Water Netserv Plan under the DR Act (LCC 2013d). The council's Water Netserv Plan Part A was endorsed by the Minister for State Development, Infrastructure and Planning in November 2013.<sup>41</sup>

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. Logan Water indicated its participation in one of the Key Possible Projects included in the Bulk Water Supply Code: the potential water supply to Beaudesert via Logan's water supply system (referred to in section 4.6.2 above).<sup>42</sup>

Logan Water also participates in various SEQ regional initiatives such as the:

- (a) SEQ Water Service Provider Partnership
- (b) SEQ Operations Committee
- (c) SEQ Strategy and Planning Committee

Seqwater and the five SEQ service providers are all members of these regional groups. In general terms, these initiatives support achievement of legislative requirements and obligations under the Bulk Water Supply Code for SEQ's water service providers to work collaboratively for the greater benefit of the SEQ community.<sup>43</sup>

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

In the Draft Report, the QCA noted that Logan Water has adopted the National Asset Management System (NAMS) framework - based on the International Infrastructure Management Manual (IIMM)<sup>44</sup> - for its Asset Management Policy and Asset and Services Management Plan (ASMP). 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 specified by PAS-55.<sup>45</sup> Based on the documentation it reviewed, SKM reviewed Logan Water's asset management system against PAS-55. SKM identified a range of issues with Logan Water's asset management system. For example, asset management training was not included in the asset management documentation and requirements for (i) implementation of asset management plans, (ii) performance assessment and improvement, and (iii) management review, were partially

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<sup>40</sup> The AOR is required under the LGR, s 190(1)(c).

<sup>41</sup> LCC supporting information (2013).

<sup>42</sup> LW supporting information (2013).

<sup>43</sup> LCC supporting information (2013).

<sup>44</sup> The IIMM is published by the Institute of Public Works Engineering Australia (IPWEA).

<sup>45</sup> Compliance with PAS-55 is not an objective of LCC (SKM 2014, section 3.3.3).

addressed. Accordingly, SKM concluded that Logan Water's asset management system was not in keeping with good industry practice and was not robust.

SKM also reported, however, that Logan Water's ASMP outlines a number (14) of tasks to improve asset management in the water business.<sup>46</sup> Logan Water advised that the improvement program is being progressively implemented; consultants have been engaged to assist Logan Water with a number of the tasks.<sup>47</sup>

In its submission on the Draft Report, Logan Water acknowledged that its asset management systems were not consistent with good industry practice. Logan Water stated that this was due in large part to the significant period of instability created by the reform processes that Logan Water has been subject to since 2007. Logan Water re-iterated that, following the return of the water services to council in July 2012, a plan had been developed to implement improvements progressively with systems improvement being a key focus. Finally, Logan Water noted that SKM's report stated a number of tasks had been outlined to improve asset management in the water business (Logan Water 2014).

### Procurement

The Logan Water Alliance has a 'Procurement Management Plan' (procurement plan) in place which sets out the policies, procedures and processes to be followed by the alliance team for all procurement related activities. Although no multi-year procurement strategy and cost-saving targets have been developed by the Logan Water Alliance, SKM considered that the procurement plan was in accordance with the procurement practices adopted by most alliance type of joint ventures and aligned with good industry practices in general.

All procurement related activities (except capital projects which are carried out through Logan Water Alliance) need to follow the policies and procedures set in the Logan City Council's 'Procurement Policy and Procurement Policies Manual' (procurement manual). SKM reported that the procurement manual was under review and cost-saving targets are not included in the review. A strategic procurement plan had yet to be developed. Accordingly, SKM concluded that Logan Water's procurement practices represented work in progress and, as such, contained areas for improvement that it should endeavour to align with good industry practice.

### Summary of findings on policies and procedures

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

For example, SKM concluded that Logan Water's asset management system could be improved. For example, asset management training was not included in the asset management documentation and requirements for (i) implementation of asset management plans, (ii) performance assessment and improvement, and (iii) management review, were partially addressed. However, SKM noted Logan Water has identified a number of tasks to improve asset management in the business.

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.

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<sup>46</sup> Refer to SKM (2014), section 3.3.4.

<sup>47</sup> LW supporting information (2013).

## 4.9 Summary of adjustments for 2013-15

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

**Table 24 Logan Water's and QCA's capital expenditure as-commissioned (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Logan Water's proposed capital expenditure (incl. contributed assets)	<b>53.04</b>	<b>159.89</b>
QCA adjustments to sampled capital expenditure	0.00	-14.87
<b>Total capital expenditure</b>	<b>53.04</b>	<b>145.02</b>

Source: QCA calculations.

## 4.10 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.

### Logan Water's submission

Logan Water has adopted the asset offset approach to capital contributions. Logan Water noted developer contributions are largely network infrastructure installed in local subdivisions, but some donated assets may be trunk infrastructure built by a developer under an infrastructure agreement with the council. Logan Water provided data from 1 July 2012, consistent with its starting RAB as at 1 July 2012.

**Table 25 Logan 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	na	na	14.00	14.33	14.00
Capital Contributions	na	na	12.71	11.99	10.64
<b>Total</b>	<b>na</b>	<b>na</b>	<b>26.71</b>	<b>26.32</b>	<b>24.64</b>

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

### QCA's analysis

The QCA accepts Logan 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.

**Table 26: 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	9.99	20.65	14.00	14.33	14.00
Capital Contributions	9.29	6.99	12.71	11.99	10.64
<b>Total</b>	<b>19.28</b>	<b>27.64</b>	<b>26.71</b>	<b>26.32</b>	<b>24.64</b>

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

#### 4.11 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 entities against the benchmark.

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.

Logan 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>48</sup> To estimate inflation, the Ministerial Direction requires the QCA to use the annual March to March ABS CPI (all groups, Brisbane). Both Logan Water and the QCA have used the same estimates to index the RAB from 1 July 2013.<sup>49</sup>

Logan 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 higher starting RAB as at 1 July 2013, as noted below.

<sup>48</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).

<sup>49</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 27 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>LW</b>	<b>QCA</b>	<b>LW</b>	<b>QCA</b>	<b>LW</b>	<b>QCA</b>	<b>LW</b>	<b>QCA</b>
Gross return on capital	35.9	37.2	42.8	43.7	36.8	37.8	50.4	47.5
Less indexation	-13.3	-14.1	15.9	-16.6	-13.7	-14.4	-18.7	-18.1
<b>Return on capital</b>	<b>22.5</b>	<b>23.0</b>	<b>26.9</b>	<b>27.1</b>	<b>23.1</b>	<b>23.4</b>	<b>31.7</b>	<b>29.5</b>

Source: LW (2013b), QCA calculations.

#### 4.12 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.

##### Logan Water's submission

As noted previously, Logan Water used a starting RAB value as at 1 July 2012 consistent with the Allconnex transfer value. Logan Water did not report capital expenditure for 2010-12.

Logan Water calculated depreciation for regulatory purposes using the straight-line method and using existing asset lives. Asset lives for assets included in the transferred RAB are lower than new additions for 2012-13 as the assets transferred have a reduced remaining life as they were part of the way through their useful life.

**Table 28 Logan 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	-	-	527.33	533.49	545.66
Net additions	-	-	8.46	12.37	15.01
Indexation	-	-	10.97	13.31	13.66
Depreciation	-	-	-12.47	-13.01	-13.78
Disposals			-0.80	-0.50	-0.40
<b>Closing RAB</b>	<b>-</b>	<b>-</b>	<b>533.49</b>	<b>545.66</b>	<b>560.15</b>

Note: Net additions are net of capital contributions. Source: LW (2013b).

**Table 29 Logan 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	-	-	639.74	642.23	651.41
Net additions	-	-	9.12	14.35	120.24
Indexation	-	-	13.21	15.89	18.72
Depreciation	-	-	-19.35	-20.16	-22.05
Disposals	-	-	-0.48	-0.90	-0.72
<b>Closing RAB</b>	-	-	<b>642.23</b>	<b>651.41</b>	<b>767.60</b>

*Note: Net additions are net of capital contributions. Source: LW (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 indexation as set out in the Information Requirements for 2013-15.

The QCA starting RAB for 2013-15 is higher than Logan Water's for both water and sewerage assets. The difference arises due to the use of the QCA RAB as at 1 July 2010 and the use of actual data for 2010-12 from the most recent Allconnex Annual Report.

In response to a query from Gold Coast Water, all council water businesses are provided with further detailed information on the RAB as at 1 July 2012 for the Final Report (see **Appendix D**).

**Table 30 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	505.39	533.47	560.01	559.53	571.64
Capex	36.68	52.38	21.37	21.83	15.39
Indexation	18.67	7.19	11.84	14.14	14.37
Depreciation	-17.24	-20.29	-19.96	-13.90	-14.64
Disposals	-0.73	-0.46	-0.80	-0.50	-0.40
Capital contributions	-9.31	-12.30	-12.93	-9.46	-9.02
<b>Closing RAB</b>	<b>533.47</b>	<b>560.01</b>	<b>559.53</b>	<b>571.64</b>	<b>577.34</b>

*Source: QCA calculations.*

**Table 31 QCA asset base roll forward - sewerage (\$m)**

	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>
Opening RAB	622.58	657.36	663.80	657.50	666.62
Capex	47.30	44.25	23.35	31.21	129.63
Indexation	23.06	8.73	14.04	16.62	18.08
Depreciation	-24.33	-30.39	-29.42	-20.94	-22.78
Disposals	-1.29	-0.81	-0.48	-0.90	-0.72
Capital contributions	-9.97	-15.34	-13.78	-16.86	-15.62
<b>Closing RAB</b>	<b>657.36</b>	<b>663.80</b>	<b>657.50</b>	<b>666.62</b>	<b>775.21</b>

Source: QCA calculations.

#### 4.13 Capital costs

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

**Table 32 Comparison of Logan 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>	
	<i>LW</i>	<i>QCA</i>	<i>LW</i>	<i>QCA</i>	<i>LW</i>	<i>QCA</i>	<i>LW</i>	<i>QCA</i>
Gross return on capital	35.9	37.2	42.8	43.7	36.8	37.8	50.4	47.5
Indexation	-13.3	-14.1	-15.9	-16.6	-13.7	-14.4	-18.7	-18.1
<b>Net return on capital</b>	<b>22.5</b>	<b>23.0</b>	<b>26.9</b>	<b>27.1</b>	<b>23.1</b>	<b>23.4</b>	<b>31.7</b>	<b>29.5</b>
Return of capital	13.0	13.9	20.2	20.9	13.8	14.6	22.0	22.8
<b>Total capital costs</b>	<b>35.6</b>	<b>36.9</b>	<b>47.1</b>	<b>48.0</b>	<b>36.9</b>	<b>38.0</b>	<b>53.8</b>	<b>52.2</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 Logan 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 Logan Water's forecast operating costs for 2013-15 in accordance with the Ministerial Direction.

The QCA's assessment focussed on:

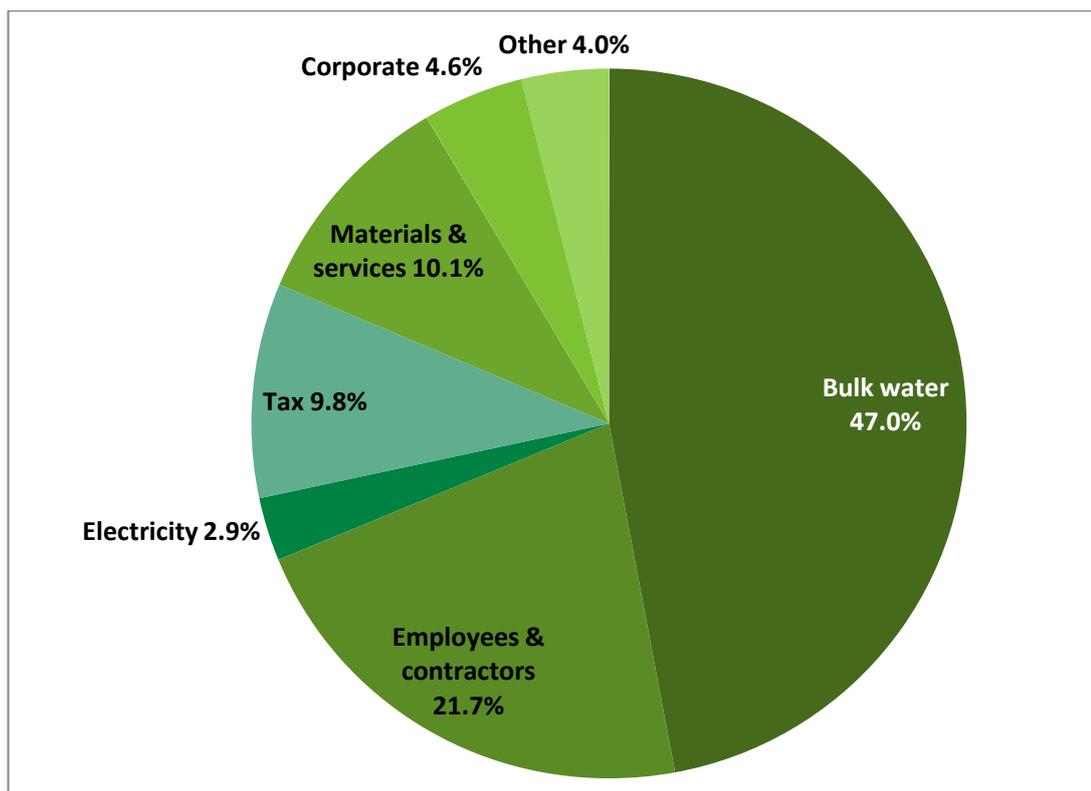
- (a) identifying the bulk and distribution/retail components of operating costs and the reasons for cost increases
- (b) high-level benchmarking of operating costs
- (c) a review of Logan Water's policies and procedures against good industry practice
- (d) the treatment of bulk water costs as a pass-through 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

Logan Water submitted operating costs of \$117 million in 2013-14 and \$125 million in 2014-15. Almost half of Logan Water's forecast operating costs over the 2013-15 period is the cost of purchasing bulk water from Seqwater (Figure 5).

**Figure 5 Logan Water's operating costs 2013-15 (\$m)**

Source: LW (2013b).

Logan Water's submitted 2013-15 operating costs are as published in the 2013-14 budget. Operating cost components have been forecast using specific cost escalators, depending on cost type. Table 33 shows Logan Water's detailed operating cost forecast.

**Table 33 Logan Water's forecast operating costs (\$m)**

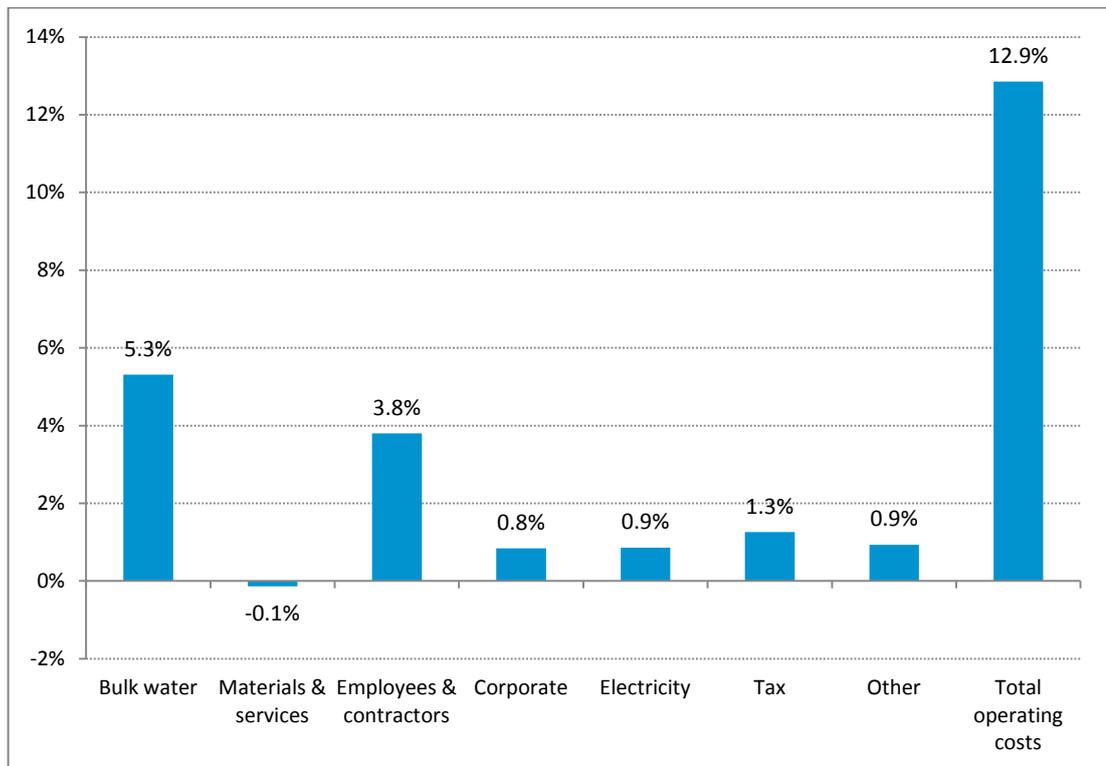
	2012-13	2013-14	2014-15
Bulk water	48.5	54.0	59.5
Materials & services	12.1	12.0	12.4
Employees & contractors	21.8	25.7	26.6
Corporate costs	4.6	5.4	5.6
Electricity	2.4	3.3	3.6
Tax	10.1	11.4	12.2
Other	3.7	4.7	4.8
<b>Total operating costs</b>	<b>103.2</b>	<b>116.5</b>	<b>124.7</b>

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

Logan Water's 2013-14 operating costs are 12.9% or \$13 million higher than in 2012-13. As with other distribution-retail entities, Logan Water has forecast an increase (\$5 million) in 2013-14 bulk water costs, over which it has little control. However, Logan Water is also forecasting cost increases (\$8 million) in distribution-retail operating costs. Logan Water's

operating cost increase is broad based. All cost categories contribute to the overall increase in operating costs, with the exception of materials and services (Figure 6).

**Figure 6 Contributions to change in operating costs 2013-14**



Source: LW (2013b).

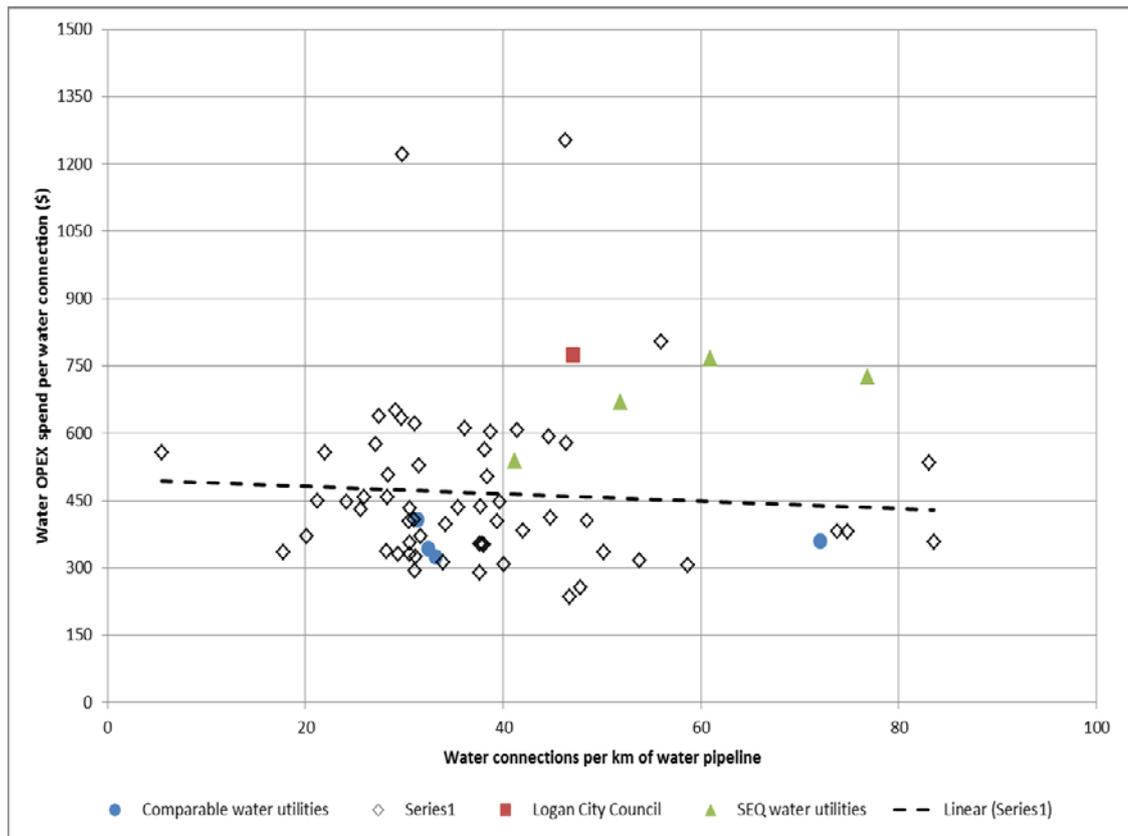
### 5.3 Benchmarking

SKM (2014) conducted high-level benchmarking of Logan Water's operating expenditure against other Australia water entities. SKM's analysis highlights four non-SEQ entities that were the most comparable to Logan Water.

SKM concluded that Logan Water's water operating expenditure was higher than comparable entities and Australian benchmarks (Figure 7). Logan Water attributed higher water costs to bulk water costs, over which it has little control.

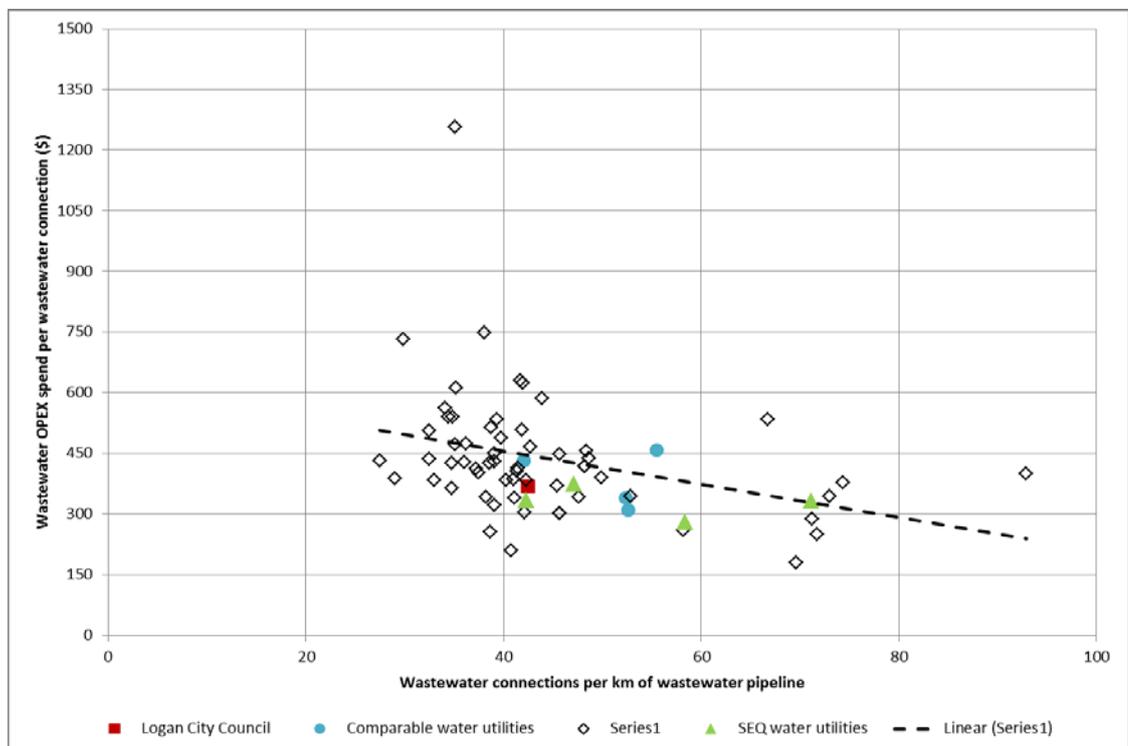
Logan Water's sewerage operating expenditure is similar to comparators (Figure 8).

**Figure 7 Water operating cost benchmarking**



Source: SKM (2014).

**Figure 8 Sewerage operating cost benchmarking**



Source: SKM (2014).

In response to the Draft Report, Logan Water submitted that other [interstate] entities have much lower bulk supply costs than those paid by Logan Water to Seqwater. Further, that Logan Water pays a higher bulk water price than other major areas of SEQ.

As in previous years, the QCA notes that there is insufficient information publicly available for rigorous benchmarking of non-bulk operating costs, largely as a result of the different supply chains used interstate. In particular, many interstate water retailers also own bulk water supplies and/or water treatment facilities. More disaggregated and comparable data would assist future benchmarking.

The QCA can confirm that Logan Water pays a higher average bulk water price than the other water retailers in SEQ (Table 34).

**Table 34 Average Bulk Water Price (\$/kl)**

	<b>2013-14</b>	<b>2014-15</b>
Unitywater	\$2.14	\$2.38
QUU	\$2.31	\$2.55
<b>Logan</b>	<b>\$2.63</b>	<b>\$2.87</b>
Redland	\$1.72	\$1.96
Gold Coast	\$2.47	\$2.72

Source: DEWS (2013b), QUU (2013), Unitywater (2013), QCA calculations.

However, the QCA has presented available benchmarking for contextual information. The QCA has not used benchmarking results to suggest any specific adjustments to operating costs.

## 5.4 Policies and planning

SKM (2014) found a number of areas where Logan Water's policies and procedures for operating costs are not consistent with good industry practice. These include inadequate asset management processes (Table 35 below).

**Table 35 Assessment of Logan Water's operating costs policies**

<i>Policy</i>	<i>SKM assessment</i>	<i>Possible areas for improvement</i>
Legislative compliance	<b>Consistent with good industry practice.</b>	
Regional perspective	<b>Consistent with good industry practice.</b>	
Asset management	<b>Not consistent with good industry practice.</b>	Logan Water's ASMP lists 14 tasks to improve asset management in the water business (section 4.8 above)
Procurement	<b>Consistent with good industry practice.</b>	Could undertake post-implementation benefits realisation reviews of projects Should complete review of the Procurement Policies Manual and include cost savings targets in the review. Should develop a strategic procurement plan.
Budget formation	<b>Consistent with good industry practice.</b>	Benchmark controllable operating expenditure against similar entities Establish savings options through review of business operating processes for improvements in operating efficiency Develop and document formal budget preparation procedures Implement robust capital works selection and gateway decision making process to help target infrastructure that require higher benchmark operation and maintenance expenditure

Source: SKM (2014).

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

### Bulk water

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

However, Logan Water's 2013-14 forecast bulk water cost (\$54.0 million) is based on the previous bulk water price announced in 2010. Logan Water submitted that it did not update its budgeted costs for the more recent bulk water price announced in May 2013 (DEWS 2013b) because of materiality (Logan Water 2013a). The QCA has applied the more recent bulk water prices, which are \$25/ML lower for the Logan region. Adjusting for this and its review of bulk water demand (Chapter 3), the QCA reduced bulk water costs by 1.9% in 2013-14 and 0.7% in 2014-15 (Table 36). The bulk water costs are then passed-through into the MAR.

**Table 36 Bulk water costs**

	<b>2013-14</b>	<b>2014-15</b>
Logan Water bulk water cost (\$m)	53.98	59.49
Logan Water bulk water demand (ML)	20,347	20,705
QCA bulk water demand (ML)	20,151	20,568
Bulk water price (\$/kl)	2.63	2.87
QCA revised bulk water cost (\$m)	52.96	59.09
Variance (\$m)	-1.02	-0.39
Variance (%)	-1.9%	-0.7%

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

## 5.5 Prudency and efficiency of non-bulk operating costs

Consistent with the Ministerial Direction, the QCA has reviewed the prudency and efficiency of materials and services, employees (and contractors), corporate costs and electricity. These represent 74% of Logan Water's non-bulk operating costs in 2013-15 (Table 37).

**Table 37 Logan 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	12.13	11.99	12.38
Employees & contractors	21.77	25.69	26.65
Corporate costs	4.57	5.43	5.55
Electricity	2.43	3.32	3.63
<b>Total sample</b>	<b>40.90</b>	<b>46.43</b>	<b>48.21</b>
Total non-bulk operating costs	54.73	62.52	65.25

Source: LW (2013b).

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

- (a) prudent - required to meet Logan Water's legal and regulatory obligations or its contracts with customers
- (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 represent expenditure that are not captured in the other operating cost categories. Logan Water has budgeted for materials and services expenditure to decline from \$12.1 million in 2012-13 to \$12.0 million in 2013-14, a fall of 1.2%. Expenditure is then expected to rise to \$12.2 million in 2014-15.

Given that the total 2013-14 materials and services budget has reduced from 2012-13, SKM concluded that the proposed 2013-14 budget is reasonable.

However, SKM considered that the proposed 3.2% increase in 2014-15 has not been justified by Logan Water. SKM instead proposed that the increase be limited to the parameter set in the Logan City Council Budget Guide 2013-14 of 2.2%.

The QCA accepts SKM's proposals (Table 38).

**Table 38 Logan Water materials and services costs (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Water	6.19	5.99	6.10
Sewerage	5.95	6.00	6.16
QCA total	12.13	11.99	12.26
Logan Water total	12.13	11.99	12.38
Variance	-	-	-0.12

Source: LW (2013b), SKM (2014).

### Employee and contractor costs

Logan Water (2013b) has budgeted for employee and contractor expenses to rise by 22% to \$25.7 million in 2013-14. Costs in 2014-15 are budgeted to be \$26.6 million, or 3.7% higher than 2013-14.

### Full-time equivalent positions

When Logan's water and wastewater services were transferred back from Allconnex in July 2012, 184 staff and 25 vacant positions were allocated to Logan Water. Upon review, Logan Water determined that to undertake its water supply and wastewater services responsibilities, 241 FTEs were required to perform its functions.

Logan Water has not changed its assessment of the required number of FTEs and has not budgeted for any additional FTEs in 2013-14 or 2014-15.

SKM considered that the level of FTEs is efficient.

### Vacancies

Logan Water submitted that, of the 241 FTE positions required, 57 were vacant in July 2012 when it transferred back from Allconnex. Logan Water made no allowance for vacancies in its 2013-14 and 2014-15 employee costs budget.

SKM noted that Logan Water had filled positions such that there were seven vacancies in November 2013. SKM considered that, given the state of the employment market, the total number of vacancies will continue to reduce. However, with staff turnover, SKM estimated that for the 2013-14 year the average staff vacancy rate will be about 2.5%, a saving of \$0.44 million. In 2014-15, SKM estimated an average vacancy of 2%, a saving of \$0.38 million.

### Employee cost escalation

Logan Water (2013a) submitted a cost escalation factor of 3.5% in 2013-14, in line with its Certified Agreement. This increased to 4.0% in 2014-15 to account for an additional 0.5% relating to the federal government's increase in the superannuation guarantee of 0.25% in 2013-14 and a further 0.25% in 2014-15.

The QCA notes that these increases are slightly below the long term averages of the wage price index (Table 39), but slightly 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 39 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 this proposed increase reflects general market conditions as well as the provisions of the Certified Agreement and is therefore efficient.

The QCA accepts SKM's assessment.

#### Contractors

Logan Water has budgeted for contractor expenses to increase by 60% to \$7.5 million in 2013-14.

SKM noted that \$1.6 million of Logan Water's 2012-13 budget for consultants was not incurred due to the need to concentrate on re-establishing the water and wastewater services on its return from Allconnex.

SKM noted that Logan Water planned to engage additional contractors in 2013-14 due to additional work requirements, including:

- (a) asset management strategy development and planning
- (b) master planning and hydraulic modelling
- (c) decommissioning of the effluent lagoon at Logan Village and the need to undertake water environment studies
- (d) review of the unit rates, asset hierarchy and system planning for water and wastewater asset management
- (e) Drinking Water Quality Management Plan revision, Netserv Plan consulting
- (f) smart meter reading and electronic meter reading studies
- (g) patch repair of mains and repair of house connections in the Beenleigh area.

After taking into consideration adjustments to the actual 2012-13 contractor expenditure and allowing for identified additional expenditure in 2013-14, SKM concluded that the proposed 2013-14 and 2014-15 contractor expenses are efficient.

The QCA accepts SKM's finding.

#### Conclusion

In total, the QCA has made savings of \$0.45 million and \$0.38 million to employee and contractor costs in 2013-14 and 2014-15 respectively (Table 40).

**Table 40 Logan Water employee and contractor expenses (\$m)**

	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>
Water	8.28	9.48	9.87
Sewerage	13.48	15.75	16.40
QCA total	21.77	25.23	26.27
Logan Water submitted	21.77	25.69	26.65
Variance		-0.45	-0.38

Source: SKM (2014), LW (2013b).

### Corporate costs

Corporate costs are general corporate expenditures that cannot be readily allocated to other cost types. Logan Water has budgeted \$5.5 million in corporate costs for 2013-14 (Table 41). This is forecast to increase by 2.2% to \$5.6 million in 2014-15.

The corporate functions of Logan Water are provided by internal service providers within Logan City Council in accordance with Service Level Agreements (SLAs). Under the SLA, 12% of Logan City Council's operating expenditure has been allocated to Logan Water in 2013-14.

**Table 41 Logan Water 2013-14 corporate costs (\$'000)**

	<i>Employee</i>	<i>Non-employee</i>	<i>Total</i>
Office of CEO and Directorate	467	302	769
People & Culture	266	280	545
Finance	878	336	1214
Information Services	624	838	1462
Administration	232	252	484
Records management	84	36	120
Outcomes and Performance	41	15	56
Marketing/Community Engagement	74	46	120
Customer Service	303	37	340
IT Consulting Costs	-	360	360
<b>Total</b>	<b>2,969</b>	<b>2,501</b>	<b>5,470</b>

Source: LW (2013b).

### Corporate employee costs

Labour costs account for about 54% of budgeted SLA costs for 2013-14 with a budgeted average employee cost of \$93,813. This compares to labour costs of 57% and average employee costs of \$86,683 for council as a whole.

As Logan Water does not directly employ employees for its corporate functions, SKM has not analysed the efficiency of Logan Water's corporate employee costs as implied by the SLA with Logan City Council.

### Corporate non-labour costs

SKM noted that Logan Water's 2012-13 costs were estimated at a high level prior to Logan Water returning to Logan City Council from Allconnex and that the estimated cost in 2013-14 represents an 18.9% increase from the 2012-13 estimate.

SKM could not determine the appropriateness of the 18.9% increase in 2013-14.

SKM noted, however, that Logan Water's budget parameters for 2013-14 were based on a more detailed assessment of costs and include a cost escalation factor of (only) 2.2% for materials and services.

Overall, SKM concluded that, based on prior experience, operating efficiencies of 2% per annum would be achievable from 2013-14.

The QCA accepts SKM's proposed efficiencies.

### Conclusion

The QCA considers that there is scope for Logan Water to make savings in its corporate costs (Table 42).

**Table 42 Logan Water corporate costs (\$)**

	<b>2013-14</b>	<b>2014-15</b>
Logan Water's corporate costs	5,434,000	5,551,000
Efficiency target	-109,000	-222,000
<b>Total corporate costs</b>	<b>5,325,000</b>	<b>5,329,000</b>

Source: SKM (2014).

### Electricity

Logan Water purchases electricity through two contracts - one for large sites that consume more than 100 MWh per annum and the other for small sites.

### Energy use

Logan Water's electricity budget for 2012-13, as recorded in its information template, was derived after extrapolating actual year-to-date data (up until January 2013) for the rest of the financial year. This underestimated demand for the second half of the year as the use of electricity at sewerage pump stations and treatment plants tends to be higher in the wet months. Logan water has since explained that demand was actually 2.3% higher in 2012-13 than it submitted in its information template.

The QCA accepts that electricity demand for 2012-13 was 2.3% (or \$0.06 million) higher than submitted as a result of wetter weather than forecast by Logan Water.

Logan Water has forecast growth in electricity use of 2.6% for 2013-14 and 1.6% for 2014-15.

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 services and sewerage connections to forecast Logan Water's energy use. This equates to average growth of 0.2% in 2013-14 and 2.1% in 2014-15.

### Energy prices

Logan Water's electricity price for large sites is made up of usage and network charges. Logan Water has forecast price increases using the terms of its current electricity contract until it expires in 31 December 2013. Overall, Logan Water has applied a price escalation factor of 25.3% for 2013-14 and 7.9% for 2014-15. The bulk of this price increase is accounted for by small sites (over 80% in 2013-14).

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. Accordingly the net increase in Logan Water's 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).

### Other adjustments

Logan Water indicated to SKM that it has had to make the following adjustments to electricity costs in 2012-13:

- (a) an additional \$50,000 applied to Logan River Pump Station to account for a change in water flows
- (b) additional billing of \$50,000 for the Alfred St Bypass Pump Station to account for meter under-reading in 2012-13
- (c) billing errors associated with changeover sites from Allconnex Water to Logan City Council currently estimated to be \$12,000
- (d) correction for errors regarding the applicable electricity tariff estimated to be \$5,000.

These adjustments are summarised in the table below.

**Table 43 Revised Logan Water electricity costs (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Logan Water total	2.43	3.32	3.63
Wet weather adjustment	0.06		
Other adjustments in 2012-13	0.12		
Escalation adjustment		-0.32	-0.44
<b>QCA total</b>	<b>2.61</b>	<b>3.00</b>	<b>3.19</b>

Source: QCA calculations.

### Tax

Logan Water submitted a tax cost of \$11.4 million in 2013-14, based on a tax rate of 31% applied to earnings before tax less donated assets.

The QCA's tax estimate is calculated to be consistent with its estimate of the MAR (Chapter 7). As per standard regulatory practice, the QCA deducts interest expenses based on the benchmark level of debt. The QCA's tax estimate also adopts a tax rate of 15%, which is the corporate tax rate of 30% adjusted for tax imputation credits. In combination, these two factors make the QCA's tax allowance substantially lower than Logan Water's (Table 44).

**Table 44 Tax (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Logan Water submitted	11.40	12.20
QCA	0.91	1.09
<b>Variance</b>	<b>-10.49</b>	<b>-11.11</b>

Source: QCA calculations.

In response to the Draft Report, Logan Water submitted that the difference in tax estimates was due to Logan Water's calculation being based on the Local Government Tax Equivalents Regime which differs from the QCA's regulatory tax calculation.

The QCA does not attempt to replicate Logan Water's actual tax or tax equivalents expense.

The QCA's methodology, consistent with standard regulatory practices, provides a benchmark allowance for tax that is consistent with Logan Water MAR and the benchmark WACC. For example, the QCA's tax estimate uses a benchmark capital structure, cost of debt and takes into account the benefits provided to shareholders from franking credits. These assumptions ensure that the total MAR is sufficient to provide the rate of return required by benchmark investors.

That is, the QCA uses benchmark (not actual) data for its tax estimate.

Logan Water also submitted that taxation expenditure should be itemised separately from operating costs, as it is a calculation which is influenced by the level of operating profit. Logan Water also submitted that the majority of operational savings suggested by the QCA relate to tax, which overstates the savings in operating costs.

The QCA agrees that tax estimate is a calculated value. However, the QCA has chosen to include tax in its estimates of operating costs to reduce the number of sub-components of MAR and simplify the presentation of its findings. Tax costs are not capital in nature.

The QCA acknowledges that the difference in cost estimates between the QCA and Logan Water are primarily due to tax. In response to Logan Water's concerns, the QCA has now also separately reported the reduction to non-bulk, non-tax operating costs (see below).

## 5.6 Operating costs summary

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

- (a) a revised bulk water cost estimate (-\$1.4 million)
- (b) a reduced escalation factor for materials and services (-\$0.1 million)
- (c) a vacancy factor for employee expenses (-\$0.8 million)
- (d) a 2% efficiency factor for non-labour corporate costs (-\$0.3 million)
- (e) revised electricity costs (-\$0.8 million)
- (f) a large reduction in the allowance for tax (-\$21.6 million).

Overall, this is a reduction of \$25.1 million or 10.4% of Logan Water's operating costs. Excluding the revision to bulk water costs (-\$1.4 million) and tax (-\$21.6 million), it is a \$2.0 million or 2.0% reduction to non-bulk, non-tax operating costs.

**Table 45 Revised operating costs 2013-15 (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Bulk water	52.96	59.09
Materials & services	11.99	12.26
Employees & contractors	25.23	26.27
Corporate costs	5.32	5.33
Electricity	3.00	3.19
Tax	0.91	1.09
Other	4.69	4.84
Total operating costs	104.11	112.07
Logan Water proposed total	116.50	124.74
<b>Variance</b>	<b>-12.38</b>	<b>-12.67</b>

*Note: excludes unregulated services. Source: SKM (2014), 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

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

- (a) the RAB as at 1 July 2012 transferred from Allconnex Water
- (b) the asset offset approach to the treatment of capital contributions
- (c) the benchmark WACC of 6.57%.

As noted in Chapter 4, the QCA has adopted a different approach to estimating the value of Logan Water's RAB.

### 6.3 Costs for 2013-15

The key components of Logan Water's costs for its water and sewerage activities are set out in Table 46 and Table 47 below.

**Table 46 Logan Water Costs - Water (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Bulk water	48.5	54.0	59.5
Other operating costs	21.7	23.3	24.3
Return on capital	24.1	22.5	23.1
Return of capital	12.5	13.0	13.8
<b>Total Costs</b>	<b>106.8</b>	<b>112.9</b>	<b>120.7</b>

Source: LW (2013c).

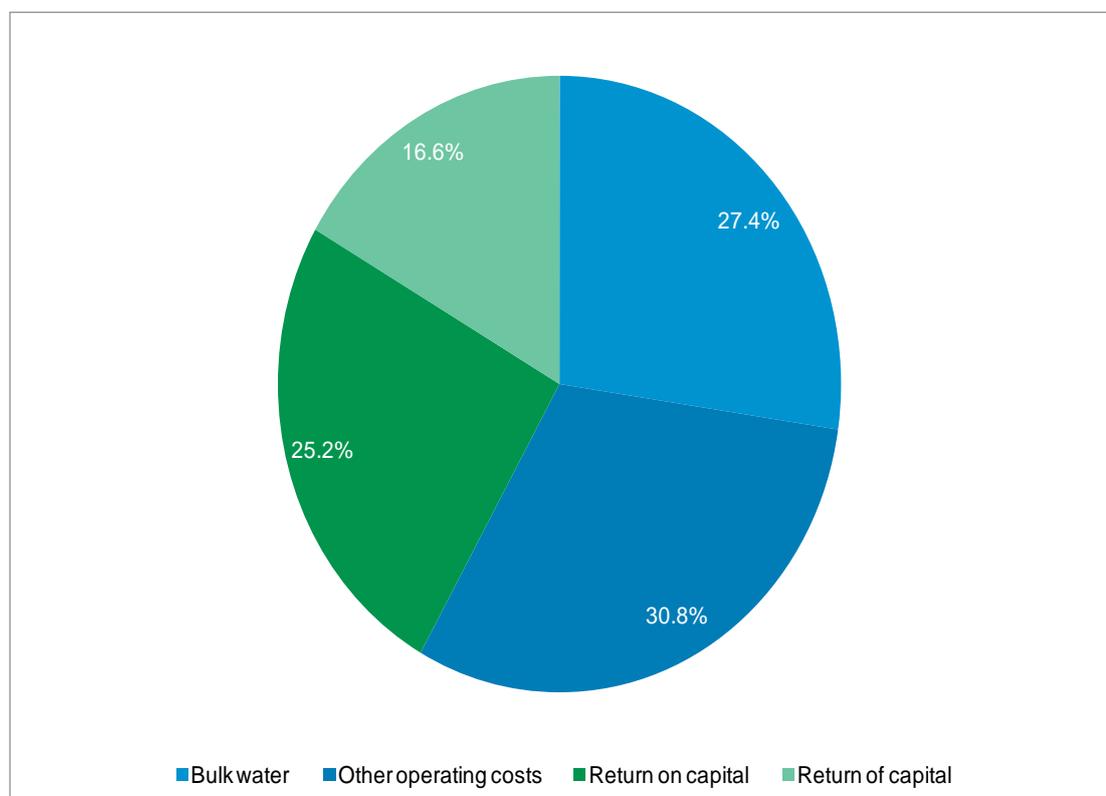
**Table 47 Logan Water Costs - Sewerage (\$m)**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Other operating costs	33.0	39.1	40.9
Return on capital	29.0	26.9	31.7
Return of capital	19.4	20.2	22.0
<b>Total Costs</b>	<b>81.3</b>	<b>86.2</b>	<b>94.7</b>

Source: LW (2013c).

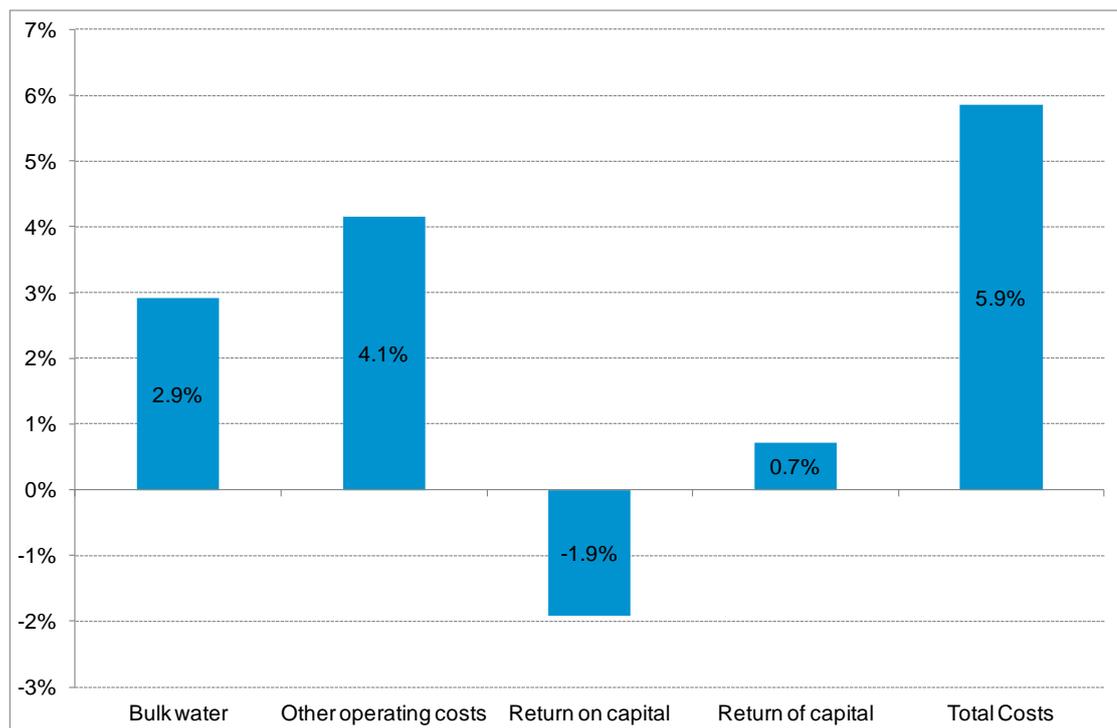
Overall, the key components of Logan Water's total costs for 2013-15 are shown in the figure below.

**Figure 9 Logan Water total costs for 2013-15**



Source: QCA chart based on LW (2013c).

The drivers of change in Logan Water's total costs in 2013-14 are set out in Figure 10 below.

**Figure 10 Contribution to change in Logan Water's total costs in 2013-14**

Source: QCA chart based on LW (2013c).

### 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 QCA's MAR lies below Logan Water's estimate of total costs.

The differences between Logan 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 (-\$1.4 million)
- (b) net reductions to retail-distribution operating costs (-\$23.6 million) arising from:
  - (i) a reduced escalation factor for materials and services (-\$0.1 million)
  - (ii) a vacancy factor for employee expenses (-\$0.8 million)
  - (iii) a 2% efficiency factor for non-labour corporate costs (-\$0.3 million)
  - (iv) revised electricity costs (-\$0.8 million)
  - (v) a large reduction in the allowance for tax (-\$21.6 million)
- (c) a lower estimate of return on capital due to capital expenditure savings (-\$1.3 million)
- (d) a higher estimate of return of capital, due to a higher asset base (+\$3.2 million).

**Table 48 QCA MAR - Water (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Bulk water	53.0	59.1
Other operating costs	19.9	20.6
Return on capital	23.0	23.4
Return of capital	13.9	14.6
<b>Total Costs</b>	<b>109.8</b>	<b>117.7</b>

Source: QCA calculations.

**Table 49 QCA MAR - Sewerage (\$m)**

	<b>2013-14</b>	<b>2014-15</b>
Other operating costs	31.2	32.4
Return on capital	27.1	29.5
Return of capital	20.9	22.8
<b>Total Costs</b>	<b>79.2</b>	<b>84.6</b>

Source: QCA 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 Logan Water submission

Logan 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, Logan Water submitted:

- (a) water revenue of \$102.8 million is below its total costs of \$112.9 million
- (a) sewerage revenue of \$76.9 million is below its total costs of \$86.2 million
- (b) as a whole, revenues of \$179.7 million are below total costs of \$199.1 million.

For 2014-15, Logan Water submitted:

- (a) water revenue of \$111.8 million is below its total costs of \$120.7 million
- (b) sewerage revenue of \$80.4 million is below its total costs of \$94.7 million
- (c) as a whole, revenues of \$192.1 million are below total costs of \$215.4 million.

### 7.2 QCA analysis

#### Caveat on 2014-15 findings

As noted previously, Logan 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, Logan Water has not yet set its prices for 2014-15. There is a possibility that the 2014-15 revenue forecasts provided for this review will differ from those that match Logan 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 concerns when Logan 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 Logan Water revenues and QCA MAR

A comparison of Logan 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.

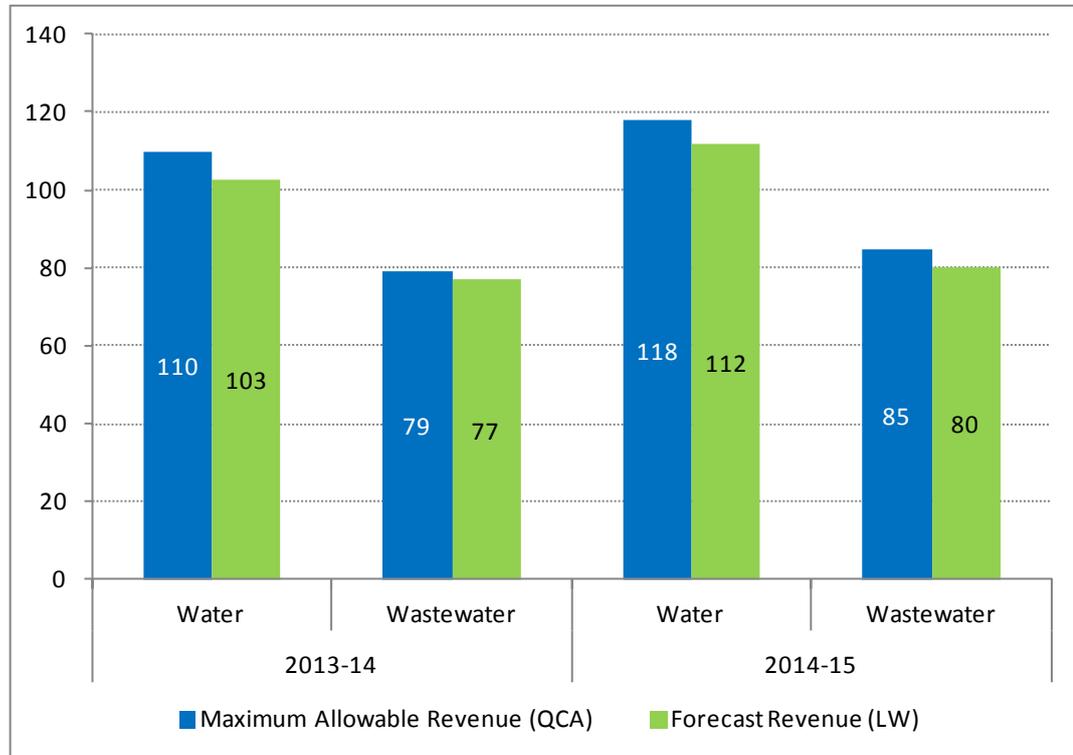
For Logan Water for 2013-14:

- (a) water revenue of \$102.8 million is 6.4% below the QCA MAR of \$109.8 million
- (b) sewerage revenue of \$76.9 million is 2.9% below the QCA MAR of \$79.2 million
- (c) as a whole, revenues of \$179.7 million are 5.0% below the QCA MAR of \$189.1 million.

For Logan Water for 2014-15:

- (a) water revenue of \$111.8 million is 5.1% below the QCA MAR of \$117.7 million
- (b) sewerage revenue of \$80.4 million is 5% below the QCA MAR of \$84.6 million
- (c) as a whole, revenues of \$192.1 million are 5% below the QCA MAR of \$202.3 million.

**Figure 11 MAR vs revenue (\$m)**



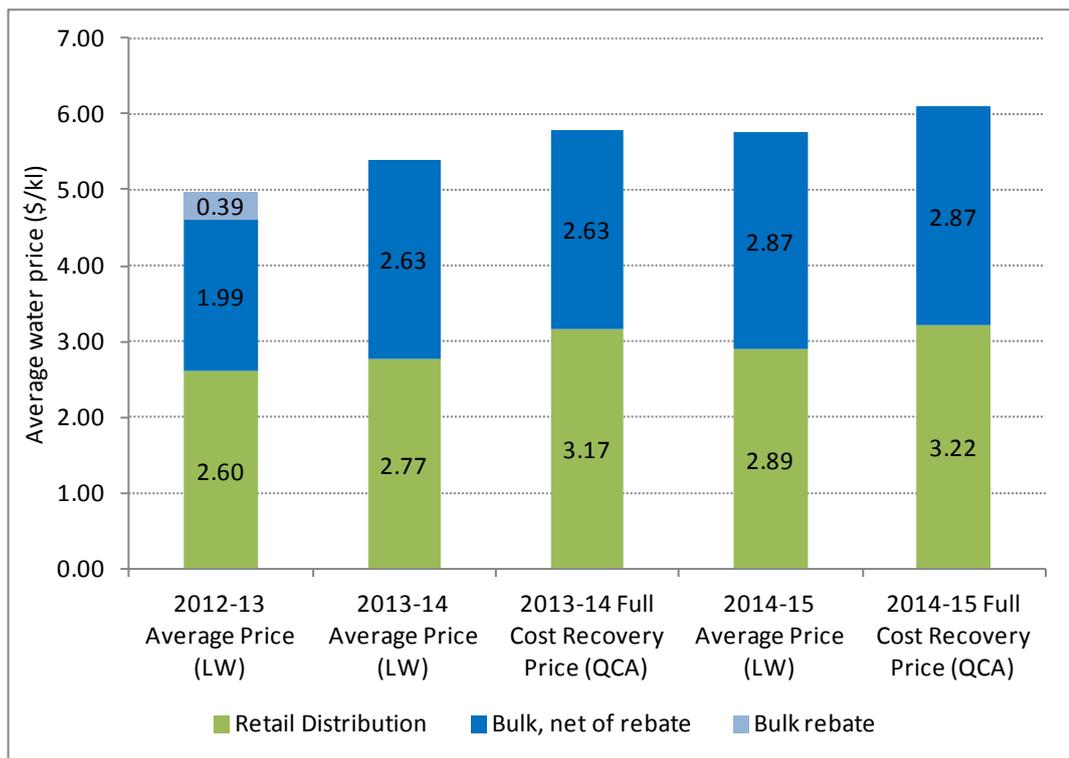
Source: LW (2013b), QCA calculations.

### Comparison of average prices

As in previous years, the QCA has also compared Logan 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.

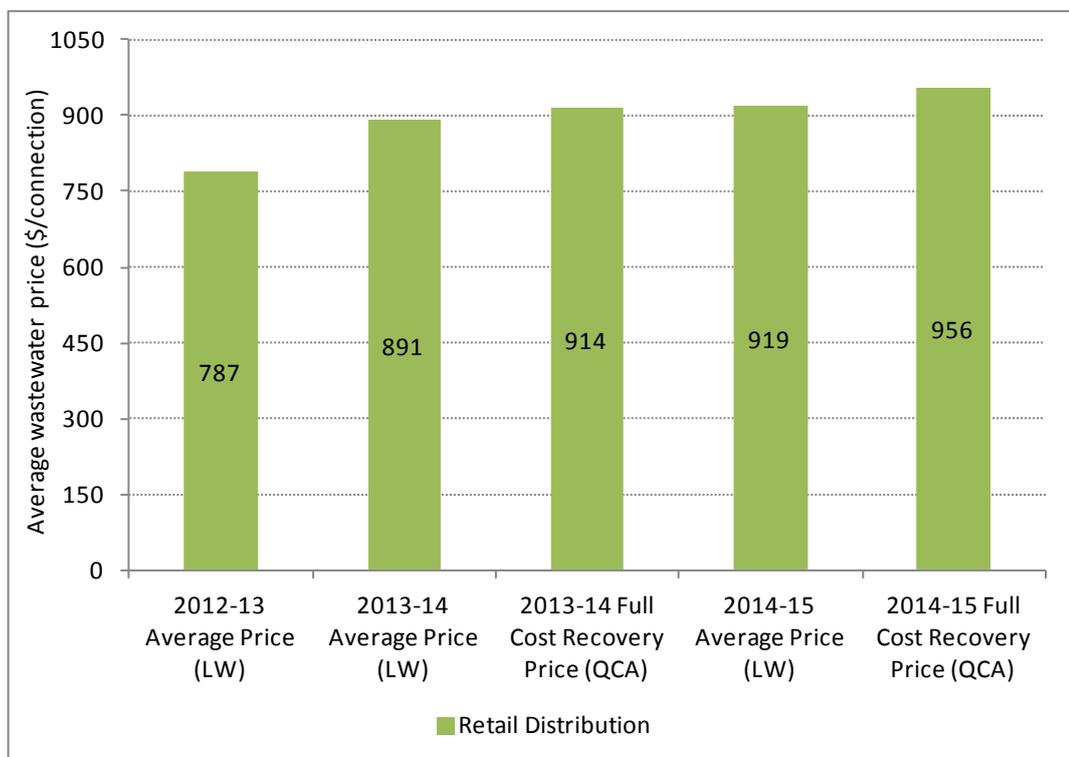
Logan Water's average annual prices are slightly below the prices which would fully recover costs for 2013-14 and 2014-15 (as shown in Figures 12 and 13 below). As stated in previous reports, prices should ideally be set and smoothed over a longer period to avoid large annual variations.

**Figure 12 Average water prices**



Source: LW (2013c), QCA calculations.

**Figure 13 Average sewerage prices**



Source: LW (2013c), QCA calculations.

### Comparison using consistent demand

In previous years, the QCA has supplemented the comparison of revenues and the MAR by using an estimate of revenue that the QCA expects Logan Water to receive. This estimate was based on the QCA's demand figures.

Due to the structure of information provide by Logan Water, the QCA is unable to apply its forecast of demand to Logan Water's pricing structure. As a result, the QCA cannot make a comparison of revenues and costs based on a consistent estimate of demand.

### QCA finding

As Logan Water's revenues in 2013-14 and 2014-15 are below the MAR, there is no evidence of an exercise of monopoly power in these years.

## 8 COSTS, REVENUES AND PRICES

The reconciliation of costs, revenues and average prices is outlined in Table 50 and Table 51 below.

**Table 50 Costs and revenues 2013-15 (\$m)**

	2013-14				2014-15			
	Water		Sewerage		Water		Sewerage	
	Logan Water	QCA	Logan Water	QCA	Logan Water	QCA	Logan Water	QCA
Bulk water	54.0	53.0	-	-	59.5	59.1	-	-
Other opex	23.3	19.9	39.1	31.2	24.3	20.6	40.9	32.4
Return on capital	22.5	23.0	26.9	27.1	23.1	23.4	31.7	29.5
Return of capital	13.0	13.9	20.2	20.9	13.8	14.6	22.0	22.8
<b>Total Costs (MAR)</b>	<b>112.9</b>	<b>109.8</b>	<b>86.2</b>	<b>79.2</b>	<b>120.7</b>	<b>117.7</b>	<b>94.7</b>	<b>84.6</b>
Total Revenues	102.8	102.8	76.9	76.9	111.8	111.8	80.4	80.4
<b>Over/(Under) recovery</b>	<b>-10.1</b>	<b>-7.0</b>	<b>-9.3</b>	<b>-2.3</b>	<b>-8.9</b>	<b>-5.9</b>	<b>-14.3</b>	<b>-4.2</b>

Source: LW (2013b and 2013c), QCA calculations.

**Table 51 Average Prices**

	2013-14				2014-15			
	Water		Sewerage		Water		Sewerage	
	Logan Water	QCA	Logan Water	QCA	Logan Water	QCA	Logan Water	QCA
Total Revenues/MAR (\$m)	102.8	109.8	76.9	79.2	111.8	117.7	80.4	84.6
Volume ('000 ML or '000 connections)*	19,049	18,934	86,333	86,697	19,386	19,327	87,412	88,518
<b>Average Price (\$/kl or \$/connection)</b>	<b>5.40</b>	<b>5.80</b>	<b>890.80</b>	<b>913.89</b>	<b>5.77</b>	<b>6.09</b>	<b>919.34</b>	<b>955.80</b>

Note: excludes demand from standpipes. Source: LW (2013b), QCA calculations.

## 9 KEY FINDINGS FOR 2013-15

In 2013-14, retail and distribution water access charges for residential and non-residential customers changed significantly due to harmonisation and price increases across the Logan Water service area – with the net effect ranging from an increase of 23.1% in some areas to a fall of 34.8% in other areas. Retail and distribution water usage charges increased by 6.0% and sewerage charges increased by 14.5%. Logan 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 27.4% of Logan Water's submitted total costs of supplying water and sewerage activities in 2013-15. Retail and distribution costs account for the remainder with operating costs comprising 30.8% and capital costs 41.8%

Logan Water's revenues lie below the QCA's MAR in both years (Figure 14).

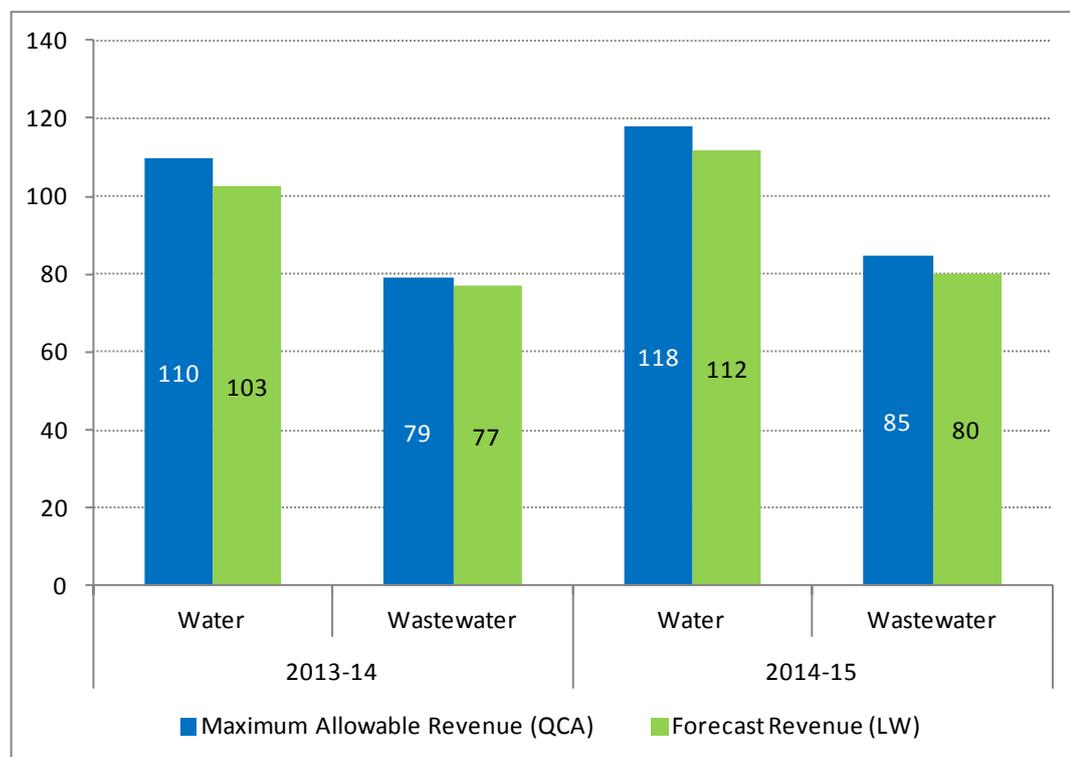
For Logan Water for 2013-14:

- (a) water revenue of \$102.8 million is 6.4% below the QCA MAR of \$109.8 million
- (b) sewerage revenue of \$76.9 million is 2.9% below the QCA MAR of \$79.2 million
- (c) as a whole, revenues of \$179.7 million are 5.0% below the QCA MAR of \$189.1 million.

For Logan Water for 2014-15:

- (a) water revenue of \$111.8 million is 5.1% below the QCA MAR of \$117.7 million
- (b) sewerage revenue of \$80.4 million is 5% below the QCA MAR of \$84.6 million
- (c) as a whole, revenues of \$192.1 million are 5% below the QCA MAR of \$202.3 million.

**Figure 14 MAR and revenue (\$m)**



Source: LW (2013b and 2013c), QCA calculations.

Based on current information, there is no evidence of an exercise of monopoly power in 2013-14 or 2014-15. However, the finding for 2014-15 is based on Logan 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 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:
 
$$RAB_t = RAB_{t-1} + \text{Capital expenditure}_t - \text{Regulatory Depreciation}_t - \text{Disposal}_t + \text{Indexation}_t$$

*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**

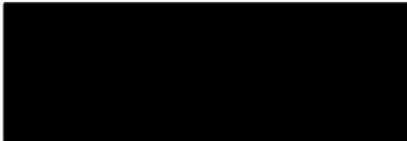
The QCA must undertake an open consultation process with all relevant parties and consider submissions within the timetable for the review and reports. Consistent with section 34 of the QCA Act, all reports and submissions must be published on the QCA website.

**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: LOGAN WATER SELECTED PRICES<sup>50</sup>

		2012-13	2013-14	\$inc/(dec)	% inc/(dec)		
<b>Utility Charges</b>							
<b>Water Base Charges ( per annum )</b>							
<b>Residential</b>							
			Harmonised				
	Logan East ( ex Gold Coast )	\$226.64	\$279.00	\$52.36	23.1%		
	Logan South ( ex Beaudesert )	\$428.16	\$279.00	-\$149.16	-34.8%		
	Logan North ( former Logan CC )	\$251.84	\$279.00	\$27.16	10.8%		
<b>Non Residential</b>							
	Logan East ( ex Gold Coast )	\$370.20	\$279.00	-\$91.20	-24.6%		
	Logan South ( ex Beaudesert )	\$428.16	\$279.00	-\$149.16	-34.8%		
	Logan North ( former Logan CC )	\$251.84	\$279.00	\$27.16	10.8%		
Capacity factor table unchanged for Logan South and North							
Capacity factor table changed for Logan East in 2013/14 to agree to remainder of Logan							
Note - in 2013/14 a harmonised price was originally struck ie \$263.32 and then a 6% increase applied ( subject to rounding ). overall no additional revenue was gained by applying the harmonised price of \$263.32 to residential and non residential							
<b>Water Volumetric Charges ( per kilolitre )</b>							
All Logan							
	Bulk Water Charge	\$2,3828	\$2,6280	\$0,2452	10.3%		
	LCC charge	\$0,8993	\$0,9533	\$0,0540	6.0%		
		\$3,2821	\$3,5813	\$0,2992	9.1%		
<b>Sewerage Charges ( per annum )</b>							
	Per unit charges ( different units for type of use - standard residential 20 units )	\$28.90	\$33.08	\$4.18	14.5%		
Logan North& Logan South unchanged for level of units per customer category							
Logan East have the same per unit charge but a varying number of units per customer. On transfer from Gold Coast, the Gold Coast bill amount was maintained with a level of units calculated by dividing the \$ amount by the per unit charge. This level of units was maintained until 2013/14 when the prices were harmonised. Unable to provide customer details as individual customers have different level of units brought about by Gold Coast charges being based on a percentage of water consumption.							
<b>Trade Waste</b>							
<b>Base Charges</b>							
	Category 1	\$93.19	\$97.85	\$4.66	5.0%		
	Category 2	\$625.02	\$656.27	\$31.25	5.0%		
	Category 3	\$935.82	\$982.61	\$46.79	5.0%		
<b>Conveyance and treatment charge</b>							
	Category 1	Flat fee	\$272.79	\$286.43	\$13.64	5.0%	
	Category 2	Volume	per kl	\$1.4902	\$1.5647	\$0.0745	5.0%
	Category 3	Volume	per kl	\$0.7766	\$0.8154	\$0.0388	5.0%
		BOD	per kg	\$1.2069	\$1.2672	\$0.0603	5.0%
		NFR	per kg	\$1.7946	\$1.8843	\$0.0897	5.0%
		COD	per kg	\$0.6402	\$0.6722	\$0.0320	5.0%
		TOG	per kg	\$0.9026	\$0.9477	\$0.0451	5.0%
		other	per kg	\$0.9026	\$0.9477	\$0.0451	5.0%
<b>Trade Waste - Cooling Towers</b>							
	First 500kl - flat fee	\$272.79	\$286.4300	\$13.64	5.0%		
	Over 500kl - \$/kl	\$1.4902	\$1.5647	\$0.0745	5.0%		
<b>Generators with waste disposal units ( additional )</b>							
	Category A < 400 Watts	per annum	\$1,156.09	\$1,323.20	\$167.11	14.5%	
	Category B - 401 - 700 Watts	per annum	\$2,890.23	\$3,308.00	\$417.77	14.5%	
	Category C - 701 - 1000 Watts	per annum	\$4,046.32	\$4,631.20	\$584.88	14.5%	
	Category D - 1001 - 1500 Watts	per annum	\$5,202.42	\$5,954.40	\$751.98	14.5%	
	Category E - 1501 - 2000 Watts	per annum	\$6,936.56	\$7,939.20	\$1,002.64	14.5%	
	Category F - > 2001 Watts	per annum	\$8,092.65	\$9,262.40	\$1,169.75	14.5%	
	( aligns with sewerage charges )						
<b>Trade Waste Quality Analysis Charge</b>							
	Contract Customers	per annum	\$302.66	\$317.80	\$15.14	5.0%	
	Default Customers	per annum	\$330.45	\$346.98	\$16.53	5.0%	
Logan East trade waste customers were only charged a base charge in 2012/13. Conveyance and treatment charges will be introduced in 2013/14 as ab							

<sup>50</sup> Residential and non-residential charges, including trade waste and recycled water..

		2012-13	2013-14	\$inc/(dec)	% inc/(dec)
<b>Commercial and Other Charges</b>					
( note - Price on Application fees (POA) have not been included)					
<b>Water Service Installation</b>					
Standard Residential 20mm	per installation	\$1,347.06	\$1,414.41	\$67.35	5.0%
25mm residential	per installation	\$1,526.97	\$1,603.32	\$76.35	5.0%
25mm short	per installation	\$2,185.13	\$2,294.39	\$109.26	5.0%
25mm long	per installation	\$3,320.49	\$3,486.51	\$166.02	5.0%
32mm short	per installation	\$3,319.39	\$3,485.36	\$165.97	5.0%
32mm long	per installation	\$4,651.10	\$4,883.66	\$232.56	5.0%
40mm short	per installation	\$3,976.47	\$4,175.29	\$198.82	5.0%
40mm long	per installation	\$5,013.10	\$5,263.76	\$250.66	5.0%
50mm short	per installation	\$5,122.79	\$5,378.93	\$256.14	5.0%
50mm long	per installation	\$6,201.10	\$6,511.16	\$310.06	5.0%
<b>Ready Tap installation</b>					
Potable or recycled water - 20mm meter and meter box	per installation	\$303.85	\$319.04	\$15.19	5.0%
<b>Water Main Tapping ( Group Title )</b>					
	each	\$421.23	\$442.29	\$21.06	5.0%
<b>Disconnection of Water</b>					
	per disconnec	\$598.94	\$420.00	-\$178.94	-29.9%
<b>Water Meters - Accuracy Tests</b>					
20mm & 25mm - by independent body	per test	\$488.14	\$290.00	-\$198.14	-40.6%
32mm - by independent body	per test	\$535.32	deleted		
40mm - by independent body	per test	\$535.32	deleted		
50mm - by independent body	per test	\$569.31	deleted		
80mm - by independent body	per test	\$569.31	deleted		
100mm - by independent body	per test	\$632.94	deleted		
32mm to 100 mm - by independent body	per test	n/a	POA		
Consumption Test - 20mm & 25mm tested on site	per test	\$120.26	\$126.69	\$6.43	5.3%
<b>Water Meters - Related Services</b>					
Replace stolen water meter	each	\$194.27	\$203.98	\$9.71	5.0%
<b>Water Repair Services</b>					
Repairs to Standard 20mm Water Service					
During work hours	each	\$295.89	\$310.68	\$14.79	5.0%
After hours	each	\$381.73	\$400.82	\$19.09	5.0%
<b>Sale of Water from Council Standpipes</b>					
Logan City Council Charge	per kl	\$2.68	\$2.84	\$0.16	6.0%
State Bulk Water Charge	per kl	\$2.38	\$2.62	\$0.24	10.1%
		\$5.06	\$5.46	\$0.40	7.9%
<b>Deposits</b>					
Metered Hydrant Standpipe ( refundable)	per deposit	\$1,854.00	\$1,854.00	\$0.00	0.0%
Replacement Proximity Reader - Overhead Standpipe ( refundable )	per deposit	\$55.00	\$55.00	\$0.00	0.0%
New Proximity Reader - Overhead Standpipe ( refundable )	per deposit	\$110.00	\$110.00	\$0.00	0.0%
Water Tag - Elevated Standpipe	per deposit	\$22.00	\$22.00	\$0.00	0.0%
<b>Water Demand Management</b>					
WEMP annual monitoring fee	each	\$86.15	deleted		
<b>Sale of Recycled Water</b>					
Waste Water Treatment Plant	per kl	\$1.07	\$1.12	\$0.05	4.7%
Water Tag - Beenleigh	each	\$55.00	\$65.00	\$10.00	18.2%
<b>Water Meter Reading</b>					
Special Reading	each	\$54.13	\$56.84	\$2.71	5.0%
Body Corporate - Sub Metering Charge	per meter read	\$2.73	\$1.65	-\$1.08	-39.6%
<b>Other Works</b>					
Capping off Disconnected Sewer Junction	each	\$1,019.07	\$780.00	-\$239.07	-23.5%
<b>Repairs to Private Drainage</b>					
Clearing Blocked House Drain					
Normal Working Hours - first hour on site	per hour	\$223.76	\$234.95	\$11.19	5.0%
Normal Working Hours - every subsequent quarter or part thereof	per hour	\$41.45	\$43.52	\$2.07	5.0%
After Hours & Public Holidays - first hour on site	per hour	\$310.42	\$325.94	\$15.52	5.0%
After Hours & Public Holidays - ever subsequent quarter or part thereof	per hour	\$62.19	\$65.30	\$3.11	5.0%
<b>Camera inspections of sewerage lines</b>					
Two inspections - private properties swimming pools only	each	\$1,092.26	\$1,146.87	\$54.61	5.0%
<b>Trade Waste fees</b>					
Additional inspection fees	per hour	\$76.55	\$80.38	\$3.83	5.0%
Search fees	each	\$44.33	\$46.55	\$2.22	5.0%
<b>On site supervision - water and sewerage</b>					
per hour or part thereof	per hour	\$107.99	\$113.39	\$5.40	5.0%
<b>Liquid Waste</b>					
Septic and Holding Tank - per kl or part thereof	per kl	\$54.95	\$57.70	\$2.75	5.0%
<b>Minor Building Works</b>					
Build near sewer application ( GC transferring area only )	each	\$366.37	\$384.69	\$18.32	5.0%

## APPENDIX C: RESIDENTIAL BILL CALCULATIONS

As noted in Chapter 2, Logan Water announced an average 10.6% increase in citywide residential bills. This increase related to the bill for a household using 200kl of water per annum water, following revenue-neutral harmonisation of the water access charge to \$263.32. Logan Water also excluded the impact of the bulk water rebate in this calculation.

The table below shows the increase in the bill for a household using 200kl of water per annum in 2013-14 compared to their 2012-13 bill, excluding and including the bulk water rebate.

**Table C.1: Change in Residential Bills – impact of bulk water rebate**

	<i>Excluding bulk water rebate (200kl/yr)</i>			<i>Including bulk water rebate (200kl/yr)</i>		
	<i>2012-13</i>	<i>2013-14</i>	<i>%</i>	<i>2012-13</i>	<i>2013-14</i>	<i>%</i>
<i>Logan</i>						
Retail water access	251.84	279.00	10.8%	251.84	279.00	10.8%
Retail water use	179.86	190.66	6.0%	179.86	190.66	6.0%
Retail sewerage access	578.00	661.60	14.5%	578.00	661.60	14.5%
Bulk water	476.60	525.60	10.3%	476.60	525.60	10.3%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
<b>Total Bill</b>	<b>1,486.30</b>	<b>1,656.86</b>	<b>11.5%</b>	<b>1,406.30</b>	<b>1,656.86</b>	<b>17.8%</b>
<i>Logan (ex Gold Coast)</i>						
Retail water access	226.64	279.00	23.1%	226.64	279.00	23.1%
Retail water use	179.86	190.66	6.0%	179.86	190.66	6.0%
Retail sewerage access	578.00	661.60	14.5%	578.00	661.60	14.5%
Bulk water	476.60	525.60	10.3%	476.60	525.60	10.3%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
<b>Total Bill</b>	<b>1,461.10</b>	<b>1,656.86</b>	<b>13.4%</b>	<b>1,381.10</b>	<b>1,656.86</b>	<b>20.0%</b>
<i>Logan (ex Beaudesert)</i>						
Retail water access	428.16	279.00	-34.8%	428.16	279.00	-34.8%
Retail water use	179.86	190.66	6.0%	179.86	190.66	6.0%
Retail sewerage access	578.00	661.60	14.5%	578.00	661.60	14.5%
Bulk water	476.60	525.60	10.3%	476.60	525.60	10.3%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
<b>Total Bill</b>	<b>1,662.62</b>	<b>1,656.86</b>	<b>-0.3%</b>	<b>1,582.62</b>	<b>1,656.86</b>	<b>4.7%</b>

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**APPENDIX D: LOGAN WATER RAB AT 1 JULY 2012**


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**Table D1 Logan Water RAB at 1 July 2012 (\$'000)**

	<i>Water</i>	<i>Other Water</i>	<i>Sewerage</i>	<i>Trade waste</i>
Reservoirs	52,029.90	-	74.87	6.40
Pump stations	6,997.50	-	42,250.62	2,761.77
Treatment	-	-	71,267.39	4,175.03
Associated telemetry and control systems	2,428.60	-	1,282.83	97.43
Meters	4,994.94	1,818.62	-	-
Billing systems	951.33	-	1,093.11	93.38
Corporate systems	1,603.53	-	1,833.03	165.37
Sundry property, plant and equipment	1,237.66	-	157.11	9.25
Land	10,015.95	-	24,847.30	1,446.14
Building other than infrastructure housing	1,407.42	-	1,195.96	69.61
Distribution infrastructure not included in another category	-	121.24	-	5.17
Support services	2,045.94	-	5,462.80	466.65
Mains	474,353.03	-	476,725.85	28,308.37
Establishment Costs	-	-	-	-
Unallocated cash contributions	-	-	-	-
<b>Total</b>	<b>558,065.79</b>	<b>1,939.86</b>	<b>626,190.86</b>	<b>37,604.56</b>

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## GLOSSARY

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### A

ABS	Australian Bureau of Statistics
AOP	Annual Operational Plan
AOR	Annual Operations Report
APP	Annual Performance Plan
ASMP	Asset and Services Management Plan

### B

BMF	Business Management Framework
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### C

CBU	Commercial Business Unit
CEO	Chief Executive Officer
c/kWh	Cents per kilowatt hour
CPI	Consumer Price Index

### D

Design and Construction Code	SEQ Water Supply and Sewerage Design and Construction Code
DEWS	Department of Energy and Water Supply
DIP	Department of Infrastructure and Planning
DLGP	Department of Local Government and Planning
DMAs	District Metered Areas
DR Act	<i>South-East Queensland Water (Distribution and Retail Restructuring) Act 2009</i> (Qld)
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</i> (Qld)
EP	Equivalent Persons

### F

FTE	Full Time Equivalent
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### G

GCW	Gold Coast Water
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### H

### I

IIMM	International Infrastructure Management Manual
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### J

**K**

kl	Kilolitres
km	Kilometres

**L**

l/c/d	Litres per connection per day
LCC	Logan City Council
LGA	<i>Local Government Act 2009 (Qld)</i>
LGR	Local Government Regulation 2012 (Qld)
l/p/d	Litres per person per day
LW	Logan Water
LWA	Logan Water Alliance

**M**

m	Million
MAR	Maximum Allowable Revenue
MCA	Multi Criteria Analysis
ML	Megalitres
mm	Millimetres
MWh	Megawatt hour

**N**

N/A	Not Applicable
NAMS	National Asset Management System
NWC	National Water Commission
NPV	Net Present Value

**O**

OESR	Office of Economic and Statistical Research
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**P****Q**

QCA	Queensland Competition Authority
QCOSS	Queensland Council of Social Service
QUU	Queensland Urban Utilities
QWC	Queensland Water Commission

**R**

RAB	Regulatory Asset Base
RCC	Redland City Council

**S**

SEQ	South East Queensland
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SEQ Regional Plan	South East Queensland Regional Plan 2009-2031
SKM	Sinclair Knight Merz
SLA	Service Level Agreement
SPA	<i>Sustainable Planning Act 2009 (Qld)</i>
SPS	Sewerage Pump Station
SRRC	Scenic Rim Regional Council
SRWP	Southern Regional Water Pipeline
STP	Sewage Treatment Plant

**T**

TOC	Target Out-turn Cost
TWCM	Total Water Cycle Management

**U**

UDA	Urban Development Area
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**V****W**

WACC	Weighted Average Cost of Capital
WSAA	Water Services Association of Australia
WSZ	Water Supply Zone
WTP	Water Treatment Plant

**X****Y**

YTD	Year to Date
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**Z**

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