Queensland Competition Authority

Draft Report

SEQ Price Monitoring for 2013-15 Part B - Queensland Urban Utilities

January 2014

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SUBMISSIONS

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

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

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The closing date for submissions is 28 February 2014.

Confidentiality

In the interests of transparency and to promote informed discussion, the QCA would prefer submissions to be made publicly available wherever this is reasonable. However, if a person making a submission does not want that submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available.

While the QCA will endeavour to identify and protect material claimed as confidential as well as exempt information and information disclosure of which would be contrary to the public interest (within the meaning of the *Right to Information Act 2009* (RTI)), it cannot guarantee that submissions will not be made publicly available.

Public access to submissions

Subject to any confidentiality constraints, submissions will be available for public inspection at the Brisbane office of the QCA, or on its website at www.qca.org.au. If you experience any difficulty gaining access to documents please contact the office (07) 3222 0555.

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

Table of Contents

1 INTRODUCTION

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 on 1 July 2012).

A key focus of the review remains the prudency 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 QUU's water and sewerage services

QUU provides distribution and retail water and sewerage services to around 1.2 million people in the Brisbane, Ipswich, Somerset, Scenic Rim and Lockyer Valley local government areas.

Key characteristics of QUU's service and asset base appear in Table 1 below. A map of the area serviced by QUU forms Figure 1.

Table 1 QUU Service and Asset Base

	Brisbane	***Ipswich***	***Somerset***	***Scenic Rim***	***Lockyer Valley***	***Total***
Population[(a)]	989,569	172,433	12,369	15,873	26,601	1,216,845
Residential Water Connections[(b)]	402,264	63,864	5,090	6,274	10,192	487,684
Non-residential water connections[(b)]	30,660	1,993	533	968	512	34,665
Water reservoirs	na	na	na	na	na	122
Water supply network (km)	na	na	na	na	na	8,842
Sewerage network (km)	na	na	na	na	na	8,537
Sewage treatment plants	9	4	5	6	4	28

Note: (a) population served by QUU in 2012-13, based on the number of water connections and the average occupancy as submitted by QUU. (b) connections in 2012-13 as submitted by QUU. Source: QUU (2013b and 2012).

Figure 1 Area serviced by QUU

Source: QUU (2013d).

2 PRICES AND BILLS

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

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

For price monitoring in 2013-15, there is no legislated CPI cap which requires separate reporting for capped and non-capped services.[1]

The comparison of QUU'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

Change in prices in 2013-14

On 19 March 2013, QUU announced a 3.9% increase in the prices of distribution and retail water and sewerage services for residential and non-residential customers in 2013-14 (QUU 2013a). This excluded the increase in the State Government's bulk water charge.

In doing so, QUU stated it is continuing to provide economies of scale, operating efficiencies and improved customer service. QUU also noted these were the objectives for which it was established when the water businesses of its five shareholding councils were merged in 2010.

Further, in July 2013, QUU noted it has been working to align trade waste customer billing categories in Brisbane and Ipswich (QUU 2013b).

The QCA can confirm that QUU's prices generally increased by 3.9% in 2013-14, with some minor exceptions as noted in **Appendix B** and further below.

The QCA notes that the 3.9% increase is more than the CPI of 2.1%.[2] 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 prudency and efficiency of underlying costs is detailed further below.

[1] 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 *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld). 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.

[2] March to March Brisbane All Groups for the preceding year.

While trade waste customer billing categories are being aligned across Brisbane and Ipswich, trade waste prices remain generally higher in Ipswich, with components of trade waste prices changing by between zero and 5% in both council areas. QUU is forecasting a fall in trade waste revenues of 3.1% in 2013-14.

The prices of recycled water and sundry services have generally increased by 3.9%.[3] Charges for the laboratory testing of water meters (a sundry charge) have been harmonised in 2013-14, which has involved a fall in charges in some areas and a three-fold increase in the Lockyer Valley.[4] Following a query from the QCA, QUU noted that it had rationalised its charges for meter testing as QUU's costs were not different between regions.

A detailed assessment of the level and structure of QUU'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.[5] The pricing principles investigation will involve the release of position papers for consultation and is to be finalised in September 2014.

As noted above, the 3.9% price increase in 2013-14 excludes the impact of bulk water prices and government subsidies or rebates. The overall or net impact on customers requires consideration of all 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, QUU has not published prices for 2014-15. In its 2013-15 price monitoring submission, QUU provided a target revenue forecast for 2014-15 on an organisation-wide basis rather than a revenue forecast based on individual prices. QUU stated this is because it intends to rationalise some of its tariffs during 2013-14 for the 2014-15 year, however the individual tariffs to be rationalised have not been identified. QUU stated that the prices for 2014-15 will be a reflection of the set of rationalised tariffs and the targeted revenue.

As QUU 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 QUU'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.

On 1 July 2013, QUU confirmed its 3.9% price increase and noted the State Government bulk water price increase of between 9.3% and 12.3% would also be applied (QUU 2013c).[6] QUU

[3] There are some slight variations in the percentage increase due to the rounding of prices, such that the increase in most sundry prices varies between 2.6% and 4%, excluding meter testing.
[4] Meter testing by request in the Lockyer Valley increased from $82.00 in 2012-13 to $283.00 in 2013-14.
[5] More information is available from the QCA's website: http://www.qca.org.au/water/SEQLTRGPP/
[6] Bulk water charges increased for QUU as follows: Brisbane 11.9%; Ipswich 12.3%; Lockyer Valley 10.9%; Scenic Rim 10.4%; and Somerset 9.3% (DEWS 2013a).

stated that this meant that the average residential water and sewerage bill would increase by between 5.7% and 6.2% in 2013-14.[7]

However, the QCA notes that residential bills will increase by more than that indicated by QUU (see **Appendix D**). For example, the QCA estimates that residential bills for a household using 200kl of water a year will increase by 14.4% in Brisbane, 12.8% in Ipswich, 12.7% in Somerset, 12.4% in Scenic Rim and 14.2% in Lockyer Valley. This is a higher increase than indicated by QUU.[8]

The higher increase calculated by the QCA is predominantly due to 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.[9] This rebate no longer applies. A very small component of the higher increase calculated by the QCA is due to differences in annual water use. QUU adopts average use of 149kl; QCA adopts standard use of 200kl.

QUU 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. There are no other changes in rebates that would affect customer bills, as Brisbane City Council (BCC) rebates for pensioners and community organisations have been continued.

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

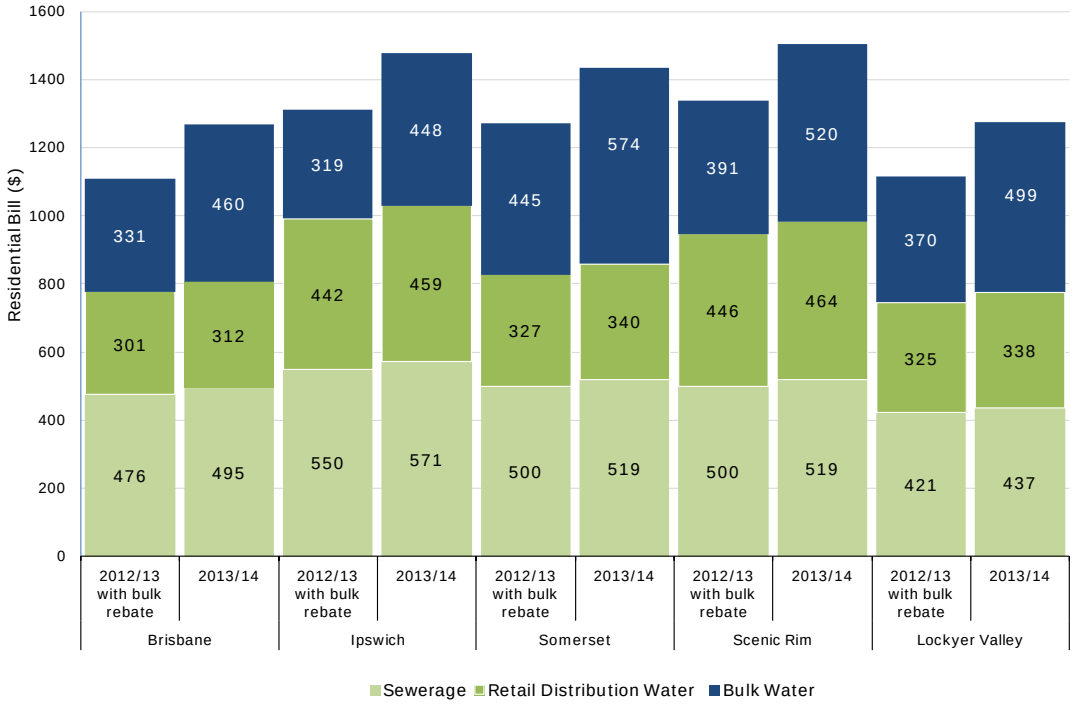
As noted above, the QUU has not released its prices for 2014-15, so the QCA cannot report on the changes in prices and residential bills in 2014-15.

[7] QUU did not identify the change in average non-residential bills. QUU receives the majority (66%) of its revenues from residential customers. Further, there is no standard non-residential water use for national performance reporting purposes. The QCA has therefore continued to focus on residential bills.

[8] 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). QUU adopted an average use of 149kl.

[9] Queensland Government Bulk Water Rebate: http://www.dews.qld.gov.au/policies-initiatives/water-sector-reform/queensland-government-bulk-water-rebate.

Chart 1 Residential bills



Note: Assumes 200kl of water per year and based on one pedestal (where relevant). The bulk water rebate was a one-off $80 deduction to the residential bill in 2013. Somerset data does not include Kilcoy. Lockyer Valley is based on connected households receiving full pressure. See Appendix D for detailed data.

2.4 Other bills

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

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

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

2.5 Hardship and stakeholder engagement

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

QUU's financial hardship policy seeks to identify customers that are willing but unable to meet their financial commitments. QUU offers various services to customers experiencing hardship, including referrals to support organisations, payment plans, payment cards, automated payments, relief from legal action and additional debt recovery provided customers meet any terms agreed with QUU, and halting the application of interest to outstanding balances.

QUU stated that its engagement with customers about costs and other factors underlying prices is primarily delivered through three processes/initiatives:

(a) the Water Netserv plan, consultation on this included newspaper advertisements, small group forums and at customer service points

(b) its customer and community reference group, which consists of eleven members representing key community sectors, local government and major industries and meets quarterly and is regularly consulted on water and sewerage pricing and related topics

(c) tracking customer insights through annual focus groups and monthly customer surveys.

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

3 DEMAND

3.1 Introduction

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

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

3.2 Water

Residential

Forecasting methodology

As in previous reviews, QUU forecast residential water volumes for 2013-15 by multiplying connected population by consumption (in litres) per person per day (l/p/d).

The QCA notes that QUU's methodology is relatively unsophisticated but appropriate for its purpose. The QCA considers that the entities should develop and compare different approaches to demand forecasting for future use. Collaborative and cost-effective approaches to considering these issues are supported.

Connections

QUU forecast residential water connections for 2013-15 by applying a growth rate to connections sourced from its billing system. QUU stated that the Office of Economic and Statistical Research (OESR) low dwelling series growth rate was significantly different from actual growth over the last two years. QUU revised its growth rate for 2013-14 to reflect actual growth and discussions with council representatives. QUU reverted to the OESR low series growth rate for 2014-15.

Table 2 Growth rates comparisons

	2011-12[(a)]	*2012-13*[(b)]	*Average 2011-13*	*2013-14*	*2014-15*
Brisbane					
QUU	1.7%	0.6%	1.1%	1.0%	1.2%
OESR[(c)]	1.2%	1.1%	1.2%	1.1%	1.1%
Ipswich					
QUU	3.4%	0.7%	2.0%	2.0%	3.8%
OESR[(c)]	4.3%	4.1%	4.2%	3.9%	3.9%
Lockyer Valley					
QUU	5.3%	-0.9%	2.2%	2.0%	3.3%
OESR[(c)]	2.7%	2.6%	2.7%	2.5%	2.6%
Scenic Rim					
QUU	7.9%	1.0%	4.5%	2.0%	4.2%
OESR[(c)]	2.0%	1.9%	2.0%	1.9%	1.9%
Somerset					
QUU	8.6%	2.0%	5.3%	2.0%	3.5%
OESR[(c)]	2.2%	2.1%	2.2%	2.0%	2.0%

Note: (a) refers to actual growth and (b) refers to estimated actual growth, as calculated by the QCA, using data submitted by QUU, (c) dwelling series growth rate calculated by the QCA, using the OESR's annual low population series data, and occupancy rates obtained using an interpolation method advised by the OESR. Source: QUU (2013e), OESR (2011), QCA calculations.

Since the 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.

QUU has used more recent (actual) data as a rationale to depart from OESR low growth forecasts for 2013-14. However, the QCA notes that QUU has not consistently adopted average actual growth rates (see table above). For some council areas, QUU used the average actual growth rate, for others QUU used OESR's low growth rate – whichever was the lower, rounded to the nearest percent. QUU has not explained the inconsistency.

On balance, the QCA is inclined to adopt the OESR low growth rate as the most authoritative forecast of connections growth. The QCA also notes that the SEQ Water Strategy Annual Report 2012 adopted OESR low growth rates to forecast bulk water demand for the next three years. The difference in growth rates is not material.

The QCA notes that as QUU forecast its 2014-15 connections by applying OESR low growth in 2011-12, 2012-13 and 2013-14 (rather than to its forecast connections in 2013-14) QUU's growth rate for Brisbane, Lockyer Valley, Scenic Rim and Somerset for 2014-15 is higher than the OESR low growth rate (adopted by the QCA).

Overall, the QCA has forecast slightly higher residential water connections than QUU in 2013-15 (Table 3).

Table 3: Residential water connections

Council	*2012-13*	*2013-14*				*2014-15*			
		QUU		*QCA*		*QUU*		*QCA*	
		Growth Rate	*#*	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*	*#*
Brisbane	402,264	1.0%	406,287	1.1%	406,692	1.2%	411,162	1.1%	411,048
Ipswich	63,864	2.0%	65,141	3.9%	66,362	3.8%	67,617	3.9%	68,967
Lockyer Valley	10,192	2.0%	10,396	2.5%	10,444	3.3%	10,739	2.6%	10,712
Scenic Rim	6,274	2.0%	6,399	1.9%	6,393	4.2%	6,669	1.9%	6,516
Somerset	5,090	2.0%	5,192	2.0%	5,194	3.5%	5,374	2.0%	5,303
Total	**487,684**	**1.2%**	**493,415**	**1.5%**	**495,084**	**1.7%**	**501,559**	**1.5%**	**502,546**

Source: QUU (2013e), OESR (2011), QCA calculations.

Consumption per person (l/p/d)

QUU noted a range of factors can affect average water consumption, including the weather, changes in user behaviour and government policy. QUU also noted that price increases (including for bulk water) could affect demand. However, without a detailed study QUU was of the view that consumption was influenced by other factors than pricing. Overall, QUU was of the view that per capita demand will increase by 5 l/p/d per year from 2012-13 budgeted average consumption in each council area.

In the 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 as a whole. The QCA accepted SKM's approach.

Recent data highlights that SEQ residents have continued to maintain water consumption below the residential water use voluntary target of 200 l/p/d (Target 200). In 2011-12, average daily residential water use in SEQ was 158 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 as a whole.

The QCA has updated SKM's previous approach for this information, estimating average residential consumption in each of QUU's council areas by assuming rebound to a whole-of-SEQ forecast of 185 l/p/d in 2016-17. As in previous reviews, the QCA recommends 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 is lower than QUU's (Table 4 refers). This flows through to (slightly) lower estimates of residential water volume (despite higher connections).

Table 4: Residential water volume (ML)

Council	*2012-13*	*2013-14*		*2014-15*	
		QUU	*QCA*	*QUU*	*QCA*
Proportion of Connections Consuming Water					
Brisbane	97.3%	97.3%	97.3%	97.3%	97.3%
Ipswich	93.7%	93.7%	93.7%	93.7%	93.7%
Lockyer Valley	73.5%	73.5%	73.5%	73.5%	73.5%
Scenic Rim	89.7%	89.7%	89.7%	89.7%	89.7%
Somerset	85.8%	85.8%	85.8%	85.8%	85.8%
Connections Consuming Water[(a)]					
Brisbane	391,340	395,253	395,648	399,996	399,886
Ipswich	59,828	61,025	62,168	63,343	64,608
Lockyer Valley	7,496	7,646	7,681	7,898	7,878
Scenic Rim	5,626	5,739	5,733	5,980	5,843
Somerset	4,365	4,452	4,454	4,608	4,548
Total	468,655	474,115	475,684	481,826	482,763
Occupancy Rates					
Brisbane	2.46	2.45	2.45	2.44	2.44
Ipswich	2.70	2.69	2.69	2.69	2.69
Lockyer Valley	2.61	2.60	2.60	2.60	2.60
Scenic Rim	2.53	2.53	2.53	2.53	2.53
Somerset	2.43	2.42	2.42	2.42	2.42
Residential l/p/d					
Brisbane	178.3	180.0	178.8	185.0	179.3
Ipswich	159.5	180.7	159.9	185.0	160.3
Lockyer Valley	153.7	155.6	154.1	160.0	154.5
Scenic Rim	160.2	165.0	160.6	170.0	161.0
Somerset	158.5	170.7	158.9	175.0	159.4
Residential Volume (ML)[(b)]					
Brisbane	62,660	63,622	63,282	65,904	63,956
Ipswich	9,401	10,825	9,776	11,506	10,175
Lockyer Valley	1,098	1,129	1,125	1,199	1,154
Scenic Rim	832	874	851	939	870
Somerset	614	671	626	712	640
Total	**74,605**	**77,122**	**75,660**	**80,260**	**76,794**

*Note: (a) Connections Consuming Water = Number of connections * Proportion of Connections Consuming Water. (b) Residential Volume = Connections Consuming Water * Occupancy Rate * Residential l/p/d * 365 days. Source: QUU (2013e), OESR (2011), QWC (2012), QCA calculations.*

Non-residential

Forecasting methodology

QUU forecast non-residential water volumes in 2013-15 by multiplying the number of connections by consumption (in litres) per connection per day (l/c/d).

Connections

QUU's non-residential water connections are divided into monthly billed accounts [large users] and quarterly billed accounts. As in the 2012-13 review, QUU applied the same growth rate as for residential water connections to its quarterly non-residential water connections.

As in previous reviews, the QCA accepts that:

(a) in the absence of historical information to forecast connections, increasing quarterly non-residential connections at the same rate as residential connections is appropriate

(b) monthly non-residential water connections will not increase in the short-term.

As for residential water connections, the QCA has adopted the OESR low growth rates to forecast quarterly non-residential water connections.

Table 5: Non-residential water connections

Council	*2012-13*	*2013-14*				*2014-15*			
		QUU		*QCA*		*QUU*		*QCA*	
		Growth Rate(1)	*#*	*Growth Rate(2)*	*#*	*Growth Rate(1)*	*#*	*Growth Rate(2)*	*#*
Brisbane	30,660	1.0%	30,961	1.1%	30,991	1.2%	31,326	1.1%	31,318
Ipswich	1,993	2.0%	2,032	3.9%	2,070	3.8%	2,109	3.9%	2,150
Lockyer Valley	512	2.0%	522	2.5%	524	3.3%	539	2.5%	538
Scenic Rim	968	2.0%	987	1.9%	986	4.2%	1,029	1.9%	1,005
Somerset	553	2.0%	544	2.0%	544	3.5%	563	2.0%	555
Total	**34,665**	**1.1%**	**35,046**	**1.3%**	**35,116**	**1.5%**	**35,565**	**1.3%**	**35,566**

Note: (1) Growth rates refer to the rates applicable to quarterly accounts. (2) OESR low dwelling series growth rates. Source: QUU (2013e), OESR (2011), QCA calculations.

Consumption per connection (l/c/d)

QUU noted significant growth in non-residential customers' water use in 2012-13 in the Ipswich, Lockyer Valley and Somerset council areas. However, QUU considered this would not be sustained in 2013-14 and adjusted its 2013-14 average non-residential consumption to reflect zero growth. QUU forecast growth of 0.5% in average non-residential water consumption for 2014-15.

As in previous reviews, the QCA notes that rebound is unlikely to be as significant for the non-residential sector, given structural changes to business consumption. However, the QCA noted that QUU's assumption of no growth in average non-residential consumption for 2013-14 is not consistent with actual data or QUU's assumption for 2013-14. The QCA therefore retains its view of 0.5% growth per year in average non-residential consumption for 2013-14 and 2014-15 being appropriate.

Table 6: Non-residential water volume (ML)

Council	*2012-13*	*2013-14*		*2014-15*	
		QUU	*QCA*	*QUU*	*QCA*
Non-residential l/c/d (Quarterly Accounts)					
Brisbane	517	517	520	520	523
Ipswich	753	753	756	756	760
Lockyer Valley	706	706	709	709	713
Scenic Rim	511	511	514	514	516
Somerset	442	442	445	445	447
Non-residential l/c/d (Monthly Accounts)					
Brisbane	38,685	38,685	38,878	38,878	39,073
Ipswich	145,634	145,634	146,363	146,363	147,094
Lockyer Valley	58,893	58,893	59,187	59,187	59,483
Scenic Rim	-	-	-	-	-
Somerset	421,722	421,722	423,831	423,831	425,950
Non-residential Volume (ML)[(a)]					
Brisbane	34,265	34,405	34,591	34,747	34,917
Ipswich	4,974	5,004	5,057	5,086	5,143
Lockyer Valley	654	659	664	671	673
Scenic Rim	325	332	333	347	341
Somerset	590	593	596	602	603
Total	**40,809**	**40,993**	**41,241**	**41,453**	**41,677**

*Note: (a) Non-residential Volume = Connections * Non-residential l/c/d * 365 days for each account type. Source: QUU (2013e), OESR (2011), QCA calculations.*

Non-revenue water (losses)

QUU's estimate of non-revenue water encompasses network losses, unbilled water and theft. In 2011-12 and 2012-13, this amounted to around 12% of total water demand by QUU, and is expected to fall further to 11.8% by 2014-15. QUU submitted it has initiated a number of programs to reduce the level of non-revenue water associated with its network, keeping in mind that at a certain point, the cost of reducing leakages outweighs the benefits of reducing these leaks. QUU viewed this as reducing cost impacts on customers over the long-term.

The QCA notes that given the historical values, QUU's loss factors are reasonable.

Therefore, the QCA accepts QUU's proposed loss factors and has applied these to estimate non-revenue water volumes.

Table 7: Non-revenue water (ML)

Council	*2012-13*	*2013-14*		*2014-15*	
		QUU	*QCA*	*QUU*	*QCA*
Total Revenue Generating[(1)] Volume (ML)					
Brisbane	96,925	98,027	97,873	100,651	98,872
Ipswich	14,376	15,829	14,833	16,592	15,318
Lockyer Valley	1,752	1,788	1,789	1,870	1,828
Scenic Rim	1,157	1,206	1,184	1,286	1,211
Somerset	1,204	1,264	1,222	1,314	1,242
Total	**115,414**	**118,114**	**116,901**	**121,713**	**118,472**
Loss Factor					
Brisbane	12.6%	12.5%	12.5%	12.5%	12.5%
Ipswich	6.3%	6.0%	6.0%	6.0%	6.0%
Lockyer Valley	21.2%	18.0%	18.0%	18.0%	18.0%
Scenic Rim	27.4%	18.0%	18.0%	18.0%	18.0%
Somerset	14.2%	18.0%	18.0%	18.0%	18.0%
Total	**12.2%**	**11.9%**	**11.9%**	**11.9%**	**11.9%**
Non-revenue Water Volume (ML)					
Brisbane	13,930	14,004	13,982	14,379	14,125
Ipswich	941	1,010	946	1,059	978
Lockyer Valley	476	393	393	411	402
Scenic Rim	442	265	260	282	266
Somerset	206	278	269	289	273
Total	**15,995**	**15,949**	**15,850**	**16,419**	**16,043**

Note: (1) The sum of residential and non-residential water demand (volume). Source: QUU (2013e), QCA calculations.

Bulk water forecasts

Bulk water demand forecasts are the sum of residential, non-residential and non-revenue water. The QCA's forecasts of bulk water are slightly lower than QUU's, arising from the QCA's view of lower average residential consumption (l/p/d).

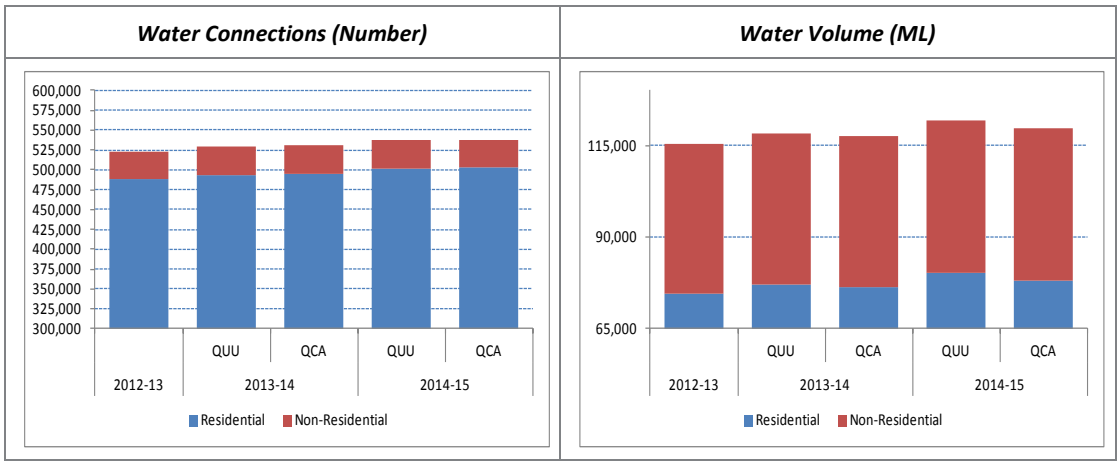
Table 8: Bulk water forecasts

Council	*2012-13*	*2013-14*		*2014-15*	
		QUU	*QCA*	*QUU*	*QCA*
Total Bulk Water (ML)					
Brisbane	110,855	112,031	111,855	115,030	112,997
Ipswich	15,317	16,839	15,780	17,651	16,296
Lockyer Valley	2,228	2,181	2,182	2,281	2,230
Scenic Rim	1,599	1,471	1,444	1,568	1,476
Somerset	1,410	1,542	1,491	1,603	1,516
Total	**131,409**	**134,064**	**132,751**	**138,133**	**134,515**

Source: QUU (2013e), QCA calculations.

Figure 2 compares QUU's and the QCA's forecasts for water connections and volume.

Figure 2: Water forecasts



Source: QUU (2013e), QCA calculations.

3.3 Sewerage

Residential and non-residential

Connections

As in the 2012-13 review, QUU applied the same growth rate as for residential water connections to its residential and [quarterly] non-residential sewerage connections.

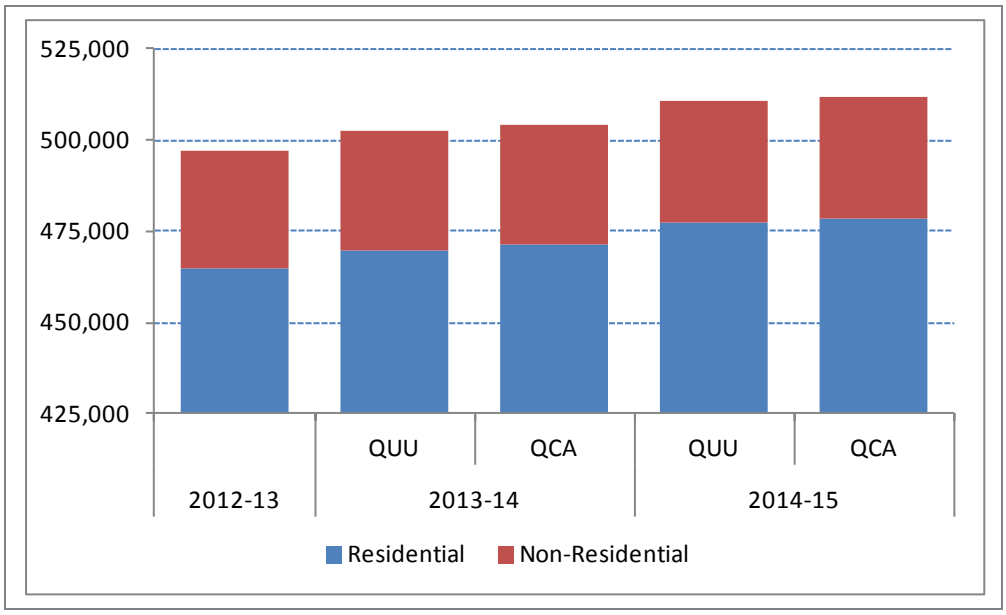
As for water (refer section 3.2 above), the QCA has adopted the OESR low dwelling series growth rates to forecast residential and [quarterly] non-residential sewerage connections. As a result, the QCA has slightly higher connections than QUU.

Table 9: Sewerage connections

Council	*2012-13*	*2013-14*				*2014-15*			
		QUU		*QCA*		*QUU*		*QCA*	
		Growth Rate[(1)]	*#*	*Growth Rate*	*#*	*Growth Rate*[(1)]	*#*	*Growth Rate*	*#*
Residential Connections									
Brisbane	395,055	1.0%	399,006	1.1%	399,404	1.2%	403,794	1.1%	403,682
Ipswich	57,755	2.0%	58,910	3.9%	60,014	3.8%	61,149	3.9%	62,370
Lockyer Valley	4,296	2.0%	4,382	2.5%	4,402	3.3%	4,527	2.6%	4,515
Scenic Rim	4,153	2.0%	4,236	1.9%	4,232	4.2%	4,414	1.9%	4,313
Somerset	3,251	2.0%	3,316	2.0%	3,317	3.5%	3,432	2.1%	3,387
Total	464,510	1.1%	469,850	1.5%	471,369	1.6%	477,315	1.5%	478,267
Non-residential Connections									
Brisbane	29,134	1.0%	29,420	1.1%	29,449	1.2%	29,767	1.1%	29,759
Ipswich	1,886	2.0%	1,923	3.9%	1,959	3.8%	1,995	3.9%	2,035
Lockyer Valley	348	2.0%	355	2.5%	357	3.3%	367	2.6%	366
Scenic Rim	701	2.0%	715	1.9%	714	4.2%	745	1.9%	728
Somerset	393	2.0%	401	2.0%	401	3.5%	415	2.1%	409
Total	**32,462**	**1.1%**	**32,814**	**1.3%**	**32,880**	**1.4%**	**33,289**	**1.3%**	**33,297**

Note: (1) Forecast growth rate applicable to residential and [quarterly] non-residential accounts. Source: QUU (2013e), OESR (2011), QCA calculations.

Figure 3: Sewerage connections forecasts



Source: QUU (2013e), QCA calculations.

3.4 Demand for capital planning

QUU's submission

QUU provided information on the process of estimating long-term demand for capital planning purposes, involving:

(a) the use of base population and employment projections and land use data sourced from its participating councils' planning models

(b) the testing, analysis and cleansing of residential and non-residential data to confirm that estimates take account of development approvals/proposals and other data.

Unlike its short term forecasts for pricing purposes, QUU used the OESR's medium population growth series over the medium and long term (2017-2031), as published by the OESR in 2008. The population figures were converted into equivalent persons (EPs) based on developable land area that is consistent with councils' plans.

Using councils' land use information, QUU disaggregated the OESR's population projections into different supply zones within its network. The residential sector is further disaggregated into four dwelling densities, namely low density residential, high and medium density, rural residential and restricted supply sectors. QUU's capital planning standard employs the parameters set out in the SEQ Water Supply and Sewerage Design and Construction Code (Design and Construction Code).

QUU also estimated non-residential demand using councils' forecasts of land use, which are converted into EPs, before residential demand peaking factors, specified in the Design and Construction Code, are applied.

QCA analysis

As in the previous review, the QCA is of the view that QUU's long term demand forecasting appears to involve a lot of manual handling and adjustments which could be automated. QUU's capital planning reflects the Design and Construction Code which came into effect on 1 July 2013.[10]

The QCA notes that QUU has addressed a concern raised in the QCA's previous review by revising its current User Guide so that updated growth projections are taken into account, rather than simply using the more conservative (higher) estimate.

3.5 Summary

Given available information, the QCA considers QUU's methodology to forecast demand for 2013-15 is reasonable. Nevertheless, the QCA has made minor adjustments to reflect its view of connections growth and average consumption. The (revised) estimates broadly confirm QUU's estimates for 2013-15.

As in the previous review, the QCA recommends 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.

[10] *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld) s 99AZ.

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 QUU's RAB based on the 1 July 2012 RAB as verified by the QCA. The QCA has sought to verify the 1 July 2012 RAB on the basis of the Ministerial Directions for 2010-13 price monitoring.

4.3 Regulatory Asset Base at 1 July 2008

The Ministerial Directions for 2010-13 required the QCA to accept the RAB as at 1 July 2008 advised by the (then) Minister for Natural Resources, Mines and Energy and Minister for Trade.

For 2013-15, QUU has not made any changes to the RAB as at 1 July 2008 (Table 10).

Table 10 QUU RAB as at 1 July 2008 ($m)

Council	*Water*	*Sewerage*	*RAB*
Brisbane	1,333.25	2,083.60	3,416.84
Ipswich	164.43	264.39	428.82
Lockyer Valley	24.57	7.71	32.28
Scenic Rim	20.55	16.86	37.41
Somerset	17.52	12.18	29.70
Total	**1,560.33**	**2,384.72**	**3,945.05**

Source: QUU (2013e).

4.4 Capital expenditure in 2008-13

The Ministerial Directions for 2010-13 required the QCA to accept as prudent and efficient:

(a) actual capital expenditure for water and sewerage (excluding establishment costs) as included in councils' financial accounts from 1 July 2008 to 30 June 2010

(b) allowable establishment costs as advised by the (then) Minister for Natural Resources, Mines and Energy and Minister for Trade

(c) contributed, donated and gifted assets and capital expenditure funded through cash contributions from 1 July 2008 to 30 June 2010.

Capital expenditure from 1 July 2010 to 30 June 2013 was accepted if it was considered prudent and efficient by the QCA. QUU has not made any changes to its capital expenditure for 2008-11. This has been reviewed and verified by the QCA (Table 11).

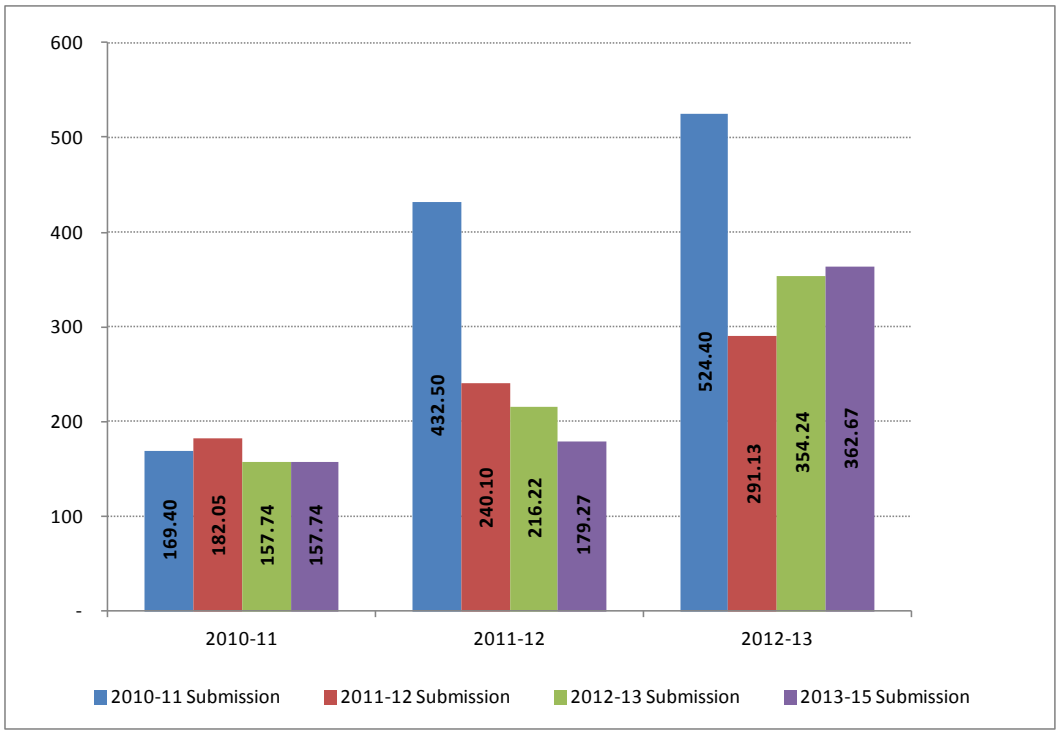
Table 11 QUU capital expenditure 2008-13 ($m)

Council	*2008-09*	*2009-10*	*2010-11*	*2011-12*	*2012-13*
Brisbane	126.61	180.73	115.86	129.85	128.87
Ipswich	45.92	51.89	37.96	31.21	217.79
Lockyer Valley	3.08	3.97	1.15	3.33	2.48
Scenic Rim	2.55	3.95	1.44	11.84	6.68
Somerset	4.35	1.84	1.33	3.03	6.84
QUU	**182.50**	**242.38**	**157.74**	**179.27**	**362.67**

Note: Includes contributed, donated and gifted assets. Source: QUU (2013e).

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

Figure 4 Capital expenditure estimates in submissions ($m)



Source: QUU (2010), QUU (2011), QUU (2012), QUU (2013e).

QUU reported lower actual capital expenditure for 2011-12 ($179.27 million) than previously estimated ($216.22 million) but higher for 2012-13 ($362.67 million) than previously ($354.24 million).

QUU noted this reflected an underlying increase of $8.4m in 2012-13, due to the net effect of:

(a) increases due to delays in the commissioning of 2011-12 projects and bringing forward of commissioning from 2013-14 due to early completion, offset by

(b) decreases due to savings/deferrals and

(c) a revision in the commissioning year of rolling programs to the year after it is incurred, to align the regulatory treatment with the accounting treatment of the expenditure. Commissioning generally occurs the year after the expenditure is incurred.

The QCA has verified QUU's capital expenditure for 2008-12 against the requirements of the previous Ministerial Directions.

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) a view of the prudency and efficiency of capital expenditure, focussing on any areas of significant cost increase and identifying the reasons why

(b) 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

(c) 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 prudency 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.

QUU's forecast capital expenditure for 2013-15

QUU's forecast capital expenditure by council area and driver are in Table 12 and Table 13.

Table 12 QUU capital expenditure 2013 to 2015 (council areas) ($m)

Council	*2013-14*	*2014-15*	*Total*
Brisbane	226.94	339.96	566.90
Ipswich	56.17	44.92	101.08
Lockyer Valley	12.20	14.55	26.75
Scenic Rim	15.59	11.69	27.28
Somerset	12.33	10.27	22.60
Total	**323.23**	**421.39**	**744.62**
Comprising:			
Water	**106.81**	**112.83**	**219.64**
Sewerage	**216.41**	**308.56**	**524.97**

Note: Includes contributed, donated and gifted assets. Source: QUU (2013e).

Table 13 QUU forecast capital expenditure 2013 to 2015 (drivers) ($m)

Capital expenditure driver	*2013-14*	*2014-15*	*Total*
Growth	88.89	158.06	246.95
Renewal	132.86	149.97	282.83
Improvement	23.24	40.96	64.19
Compliance	17.85	7.34	25.19
Contributed Assets	60.39	65.06	125.45
Total	**323.23**	**421.39**	**744.62**

Source: QUU (2013e).

QCA's approach

The QCA has considered the prudency and efficiency of QUU'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 prudency and efficiency of a sample of six capital expenditure projects and their compliance with capital policies and procedures

(b) a review of the robustness of capital policies and procedures relating to planning and delivery having regard to good industry practice.

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

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

Prudency and efficiency criteria

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

(a) prudency, an entity must demonstrate that there is a need for the expenditure, typically by reference to an analysis of its driver/s (that is, growth, renewal, improvement and compliance)

(b) efficiency, information is required on the scope and standard of the works and the corresponding cost and timing of works. This should be linked, where relevant, to the underlying cost components such as unit rates, on-costs and contingencies and supporting materials such as consultant reports. Information is also required on expenditure approval policies and procedures.

The QCA requires capital expenditure to be included in the RAB only when it is commissioned, and contributes productive capacity to the system. SKM reviewed the compliance of the sampled projects against QUU'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. Projects commissioned in 2013-15 were selected given their impact on the MAR for these years.

The sample of QUU projects reviewed in detail is shown in Table 14 below. QUU's sample accounted for 25.4% 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 QUU capital expenditure projects reviewed ($m)

Project	*Driver*	*Commissioned in 2013-15*	*As Incurred in 2013-15*
1. Brisbane Woolloongabba Sewer Catchment Augmentation	Growth	81.31	33.35
2. Brisbane Bartleys Hill / Wellers Hill Zone Connection Including Twin River Crossing	Growth	23.47	22.13
3. Ipswich Bundamba Creek Trunk Gravity Main Implementation – Stage 1a and 1b	Growth	15.67	0.10
4. Brisbane Water Meters Renewals Program	Renewal	13.60	10.26[(a)]
5. Brisbane Sewer Reticulation System Renewals Program	Renewal	11.62	11.86[(a)]
6. Brisbane Flood Resilience Program	Improvement	11.36	18.64
Total sampled expenditure		**157.03**	**96.34**
Total capital expenditure (excluding contributed assets)		**619.16**	**596.93**

Note: Table may not add due to rounding. Commissioned values reflect the value of expenditure incurred over the life of the project and capitalised interest. (a) Reflects the expenditure as-incurred that will be commissioned in 2014-16. Source: QUU supporting information (May 2013).

4.6 Prudency and efficiency of sampled projects

4.6.1 Brisbane Woolloongabba Sewer Catchment Augmentation

Background

The Woolloongabba Sewerage Catchment lies in Brisbane's inner southern suburbs. QUU submitted that growth in these areas would place stress on an already overloaded sewerage system and result in uncontrolled overflows during daily morning peak in 2016. To manage delivery of project, it was divided into two parts:

(a) Part A, completed in March 2011, included the design and construction of lines 3 and 4, and the delivery of an interceptor sewer of 1,100 metres

(b) Part B, the remainder of the proposed new sewer lines (1, 2, 5, 6, 8 and 9), involved the design and construction of 5,350 metres of gravity sewers and 14 connections to existing sewers at various locations.

QUU submitted that the expenditure incurred on the project would be $33.35m in 2013-15. A further $46.22 million was incurred from 2010-11 to 2012-13; total capital expenditure incurred will be $79.57 million. QUU submitted that expenditure of $81.31 million will be commissioned in 2013-15.

Prudency

QUU identified growth as the driver of the project.

SKM was satisfied that a range of options were adequately selected and reviewed and that the scope of augmentation works is appropriate to meet the project need.

SKM found the project to be prudent.

Efficiency

SKM was satisfied that the tendering process used for the procurement of the design and construct contract for Part B of the overall project was robust and will have resulted in a market price based on a value for money assessment.

SKM found the project to be efficient.

Policies and procedures

SKM found that the documentation - including a third party assessment by Beca Pty Ltd (Beca) and the project management plan - reviewed for this project was in line with QUU's capital delivery processes. SKM concluded that the project demonstrated no deficiency in QUU's overall policies and procedures.

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 Brisbane Woolloongabba Sewer Catchment Augmentation ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	46.22	33.35	0.00	79.57
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	46.22	33.35	0.00	79.57

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

4.6.2 Brisbane Bartleys Hill / Wellers Hill Zone Connection Including Twin River Crossing

Background

The Bartleys Hill Water Supply Zone (WSZ) is supplied from Bartleys Hill Reservoir in Ascot, comprising two reservoirs with a combined capacity of 19.8 ML. This is less than the peak day demand storage requirement of 24.2 ML to satisfy the Design and Construction Code. In September 2011, the reservoir ran dry and affected 12,000 customers.

QUU has considered a number of options to improve supply reliability and to meet the Design and Construction Code. The option QUU has selected is the construction of a dual cross river connection between Bartleys Hill WSZ and Wellers Hill WSZ, which lies to the east of Brisbane on the south side of the Brisbane River.

QUU submitted that the expenditure (as-incurred) on the project would be $22.13 million in 2013-15. A further $0.50 million was incurred in 2012-13; total capital expenditure incurred will

be $22.63 million. QUU submitted that expenditure of $23.47 million will be commissioned in 2014-15.

Prudency

QUU nominated growth as the primary driver of this project. This project is required as there is insufficient storage within the Bartleys Hill WSZ and it does not satisfy the Design and Construction Code requirement.

SKM considered the project was prudent.

Efficiency

SKM considered the scope of the works - the construction of twin trunk main to link the Wellers Hill WSZ to the Bartleys Hill WSZ and the subsequent rezoning of Bartleys Hill and Wellers WSZs - was appropriate.

SKM considered that the use of the independent cost estimate was a satisfactory method of determining costs to be included in the budget.

QUU documentation provided to SKM stated the project will be complete in April 2016. SKM considered that the $22.13 million budgeted for the project should therefore be deferred and only added to the RAB once commissioned in 2015-16.

Policies and Procedures

SKM considered that the documentation - including a feasibility report, a third party assessment by Beca and the project management plan - reviewed was in line with QUU's capital delivery processes. SKM concluded that the project demonstrated no deficiency in QUU's overall policies and procedures.

Conclusion

On the basis of SKM's advice, the QCA considers that the costs of this project should be deferred to 2015-16 when the project is due to be commissioned, as shown in Table 16 below.

Table 16 Brisbane Bartleys Hill / Wellers Hill Zone Connection and Twin River Crossing ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	0.50	3.00	19.13	22.63
SKM Adjustment	-0.50	-3.00	-19.13	-22.63
QCA Recommended	0.00	0.00	0.00	0.00

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

4.6.3 Ipswich Bundamba Creek Trunk Gravity Main – Stage 1a and 1b

Background

The Bundamba Sewerage catchment services the areas of Booval, North Booval, Silkstone, Eastern Heights, Raceview and adjoining areas. The system will be required to service significant growth (4% per annum over 36 years) in the Deebing Creek and Ripley Valley areas.

A major capacity upgrade is required to transfer future flows to the Bundamba STP. A Master Plan review concluded that Stage 1 (this project) be implemented immediately to address current wet weather flow capacity bottlenecks. Further work will identify staged upgrades from 2016.

This project originated in Ipswich Water as part of a Critical Portfolio Works Contract with a private firm. After the contract was transferred to QUU a review was conducted, and a more conventional (design and construct) procurement method was considered more appropriate for this project.

QUU submitted that the expenditure (as-incurred) on the project would be $0.10 million in 2013-15. A further $14.02 million was incurred from 2010-11 to 2012-13. Total capital expenditure incurred will be $14.10 million. QUU submitted that $15.67 million will be commissioned in 2013-14.

Prudency

QUU nominated growth as the project driver.

SKM considered that, based on the proposed growth in the network, the current hydraulic limitations of the sewer and the history of overflow events during wet weather events this project is prudent.

Efficiency

SKM was satisfied that an appropriate range of options were selected and adequately reviewed and that the scope of works is appropriate to meet the project need

SKM noted the decision by QUU to move to a more conventional contract resulted in significant project savings, demonstrating cost efficiency.

However, given the late stage of the project and the significant proportion of total expenditure attributed to contingency (47%), SKM considered a reduction in contingency of 50% ($798,000) would be prudent.

Policies and procedures

SKM considered the documentation - including a feasibility report and a third party assessment by Beca - reviewed for this project is only partly in line with QUU's capital delivery processes. The hard copy and electronic copy of the project management plan were destroyed in the January 2011 floods. SKM considered there was not a systemic issue in the projects inherited from Ipswich Water.

Conclusion

On the basis of SKM's advice, the QCA accepts that the project is prudent and an adjustment should be made for a lower contingency, as shown in Table 17 below.

Table 17 Ipswich Bundamba Creek Trunk Gravity Main - Stage 1a and 1b ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	14.00	0.10	0.00	14.10
SKM Adjustment	0.00	-0.80	0.00	-0.80
QCA Recommended	14.00	-0.70	0.00	13.30

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

4.6.4 Brisbane Water Meters Renewals Program

Background

QUU owns and maintains over 418,000 domestic and non-domestic meters for billing purposes.

In its 2012-13 review, the QCA reviewed QUU's 2012-13 expenditure of $5.60 million and found it to be prudent but not efficient (QCA 2013a).[11] Halcrow Pacific Pty Ltd (Halcrow)[12] recommended the removal of $314,200 to reflect lower meter unit costs,[13] together with an ongoing efficiency saving of 5% to be achieved through the adoption of period supply contracts for a small number of preferred meter types. The QCA accepted Halcrow's recommendation.

The program was selected for review again for the current price monitoring period based on its commissioning value and given it was found not to be efficient last year.[14]

SKM's review for the current price monitoring period focused on the program of works undertaken in Brisbane in 2012-13 and 2013-14 ($13.99 million), as these works will be commissioned in 2013-15 (Table 18).

Table 18 Brisbane Water Meters Renewals Program ($m)

	2012-13	***2013-14***	***2014-15***
Annual expenditure	7.77	6.22	4.04
2012-13 and 2013-14	**13.99**		**N/A**
2013-14 and 2014-15	**N/A**	**10.26**	

Note: capital expenditure incurred in 2012-13 and 2013-14 were reviewed as these will be commissioned in 2013-15. Source: QUU supporting information (May 2013).

Prudency

QUU identified renewals as the key driver of the program. QUU also identified compliance with AS3565.4-2007,[15] potential loss of revenue to the organisation and customer charge inequality caused by incorrect meter registration as program drivers.

SKM noted the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld) (DR Act) also requires each SEQ service provider to take reasonable steps to ensure each meter recording each of its customers' water consumption is read at least once each year.[16]

Further, the *National Measurement Act 1960* (Cth) states that utility meters used for trade must be verified in terms of accuracy of measurements in accordance with AS3565.1-2010.[17]

SKM considered that the primary driver (renewals) was demonstrated and found the program to be prudent.

Efficiency

SKM considered that the standards used for this project are appropriate.

[11] The $5.607m was net of $160,000 expenditure to be expensed.
[12] Halcrow was the QCA's consultant for the 2012-13 prudency and efficiency review of sampled capital projects.
[13] Actual meter costs in 2012-13 were $150 per meter, which was less than the $170 per meter budgeted by QUU.
[14] The increase in QUU's 2012-13 budget from $5.60m (assessed in the 2012-13 review) to $7.77m (assessed in the current review) comprises bring forward of activities from the 2011-12 program, approved (by QUU) in September 2012.
[15] AS3565.4-2007: Meters for Water Supply - In-service compliance testing.
[16] Section 99AG.
[17] AS3565.1-2010: Meters for cold and heated and non-drinking water supplies - Technical requirements.

SKM noted QUU was converting to inline meters and concluded that this is an appropriate course of action. The repeated failure of the isolation valve in the 'George Stack' manifold bases and the increasing costs of their purchase support this action.

QUU is the only organisation using 'George Stack' manifold bases. Hence the replacement bases are being produced solely for QUU. According to QUU, due to the sole supplier and purchaser situation, the cost to purchase these bases is increasing.

Ultimately it is planned that the complete Brisbane meter fleet is converted to inline meters. This will provide Brisbane with a more economical replacement option in the future, as well as bringing Brisbane into line with the rest of SEQ. It will also allow Brisbane to easier adapt to the future meter types such as composite body meters and smart meters.

SKM was satisfied that:

(a) water meters requiring renewal were identified through an appropriate process

(b) there had been sufficient and appropriate analysis of the option of replacement over refurbishment

(c) a competitive tender process occurred and a robust tender evaluation process was undertaken.

SKM noted that the business case for the Brisbane Water Meters Renewals Program for the 2011 to 2014 period was developed using a cost of $170 per meter (based on Skilltech's rates schedule for the 2010-11 year).

As in the 2012-13 review, QUU contended that Skilltech has a greater purchasing power in the market for meters than does QUU due to the size of Skilltech's business. However, SKM considered that QUU has not verified - through market testing - its assumption that Skilltech's purchasing power delivers cost efficiencies for QUU. Accordingly, SKM recommended the 5% saving previously applied by the QCA be continued. SKM also recommended the extrapolation of the 5% saving from the Brisbane Water Meters Renewals Program to meter renewals programs in other QUU regions.

Further, SKM identified calculation errors made by QUU. Amending for these reduced the 2012-13 program budget by $325,200 (from $7.77 million to $7.44 million). Applying a 5% procurement saving reduced the program budget to $7.07 million.[18]

SKM also reduced the 2013-14 program budget to reflect an average cost of $196 per meter (based on the 2011-12 actual cost per meter) in preference to QUU's estimate of $200 per meter. Based on a saving of $4 per meter, SKM reduced the program budget by $104,000 (from $6.22 million to $6.12 million). Applying a 5% procurement saving reduced the program budget to $5.81 million.[19]

QUU advised that, if the 5% saving continues to be applied, it should apply only to the cost ($35) of the meter itself, rather than the full cost of the annual programs.[20] QUU added that a 5% saving on the cost per meter would amount to $1.75 per meter. The QCA accepts QUU's position and has applied the 5% saving to the cost of the meters only. Compared to the SKM

[18] SKM (2013b), Table 6-18.
[19] SKM (2013b), Table 6-18.
[20] Skilltech advised QUU that the cost of meters is $35. This cost has remained consistent over the last couple of years. Changes in annual meter costs account for the changes in full replacement costs, including labour and materials (QUU 2013, Response to QCA Request for Information).

recommendations, this increased the program budgets for 2012-13 and 2013-14 to $7.37 million and $6.07 million respectively.

Policies and Procedures

The program has not followed the 'toll gate' or 'gateway' review process. QUU stated that, although gateway reviews are not undertaken for minor capital projects and programs, they remain subject to QUU's standard capital planning and budgeting governance frameworks.

However, QUU's capital planning and delivery process provides that "a project is considered 'major' if it has an estimated value over $5 million or it is a complex or potentially high risk project. Projects not classed as 'major' are classed as 'minor'".

Given QUU's forecast expenditure for 2013-14 is $7.77 million and for 2014-15 it is $6.22 million, SKM considered the program to be a major project for which all requirements of a major project should be undertaken and that classification as a minor project was not appropriate.

SKM noted that QUU's policies and procedures did not include a benefits realisation review so that benefits can be realised and measured against a baseline. SKM concluded there are opportunities for the program to become more efficient over time which are not being realised.

Conclusion

On the basis of SKM's and QUU's advice, the QCA accepts that the project is prudent and an adjustment should be made for a 5% procurement saving to meter costs, and for actual meter costs in each of the two years, as shown in Table 19 and Table 20 below.

Table 19 SKM adjustment to Brisbane Water Renewals Program ($m)

	2012-13 program		*2013-14 program*	
	QUU program cost ($150 / meter)	***SKM proposed ($150 / meter)***	***QUU program cost ($200 /meter)***	***SKM proposed ($196 / meter)***
Total	7.77	7.44	6.22	6.12
5% procurement saving	N/A	-0.37	N/A	-0.31
Revised total	N/A	7.07	N/A	5.81

Source: SKM (2013b).

Table 20 QCA adjustment to Brisbane Water Meter Renewals Program ($m)

	2012-13 program		*2013-14 program*	
	QUU program cost ($150 / meter)	***SKM proposed ($150 / meter)***	***QUU program cost ($200 /meter)***	***SKM proposed ($196 / meter)***
Total	7.77	7.44	6.22	6.12
5% procurement saving to meters only	N/A	-0.07	N/A	-0.05
Revised total	N/A	7.37	N/A	6.07

Source: QCA calculations.

Table 21 below shows the expenditure profile for the Brisbane Water Meter Renewals Program.

Table 21 Brisbane Water Meter Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	7.77	6.22	13.99
QCA Adjustment	N/A	-0.40	-0.15	-0.12
QCA Recommended	N/A	7.37	6.07	13.44

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

The QCA also applied 5% savings arising from procurement of meters in the Brisbane program could be extrapolated to the Ipswich, Lockyer Valley, Scenic Rim and Somerset Water Meters Renewals Programs. The tables below show the extrapolated savings for these programs.

Table 22 Ipswich Water Meter Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.598	1.105	1.703
QCA Adjustment[21]	N/A	-0.010	-0.010	-0.020
QCA Recommended	N/A	0.588	1.095	1.683

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

Table 23 Lockyer Valley Water Meter Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.175	0.158	0.333
QCA Adjustment[22]	N/A	-0.001	-0.001	-0.003
QCA Recommended	N/A	0.174	0.157	0.330

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

Table 24 Scenic Rim Water Meter Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.117	0.109	0.226
QCA Adjustment[23]	N/A	-0.001	-0.001	-0.002
QCA Recommended	N/A	0.116	0.108	0.224

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

[21] QUU intends to replace 5,575 meters in Ipswich in each of 2012-13 and 2013-14 (QUU supporting information (June 2013)).
[22] QUU intends to replace 740 meters in Lockyer Valley in each of 2012-13 and 2013-14 (QUU supporting information (June 2013)).
[23] QUU intends to replace 500 meters in Scenic Rim in each of 2012-13 and 2013-14 (QUU supporting information (June 2013)).

Table 25 Somerset Water Meter Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.171	0.079	0.250
QCA Adjustment[24]	N/A	-0.001	-0.001	-0.001
QCA Recommended	N/A	0.170	0.078	0.249

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

4.6.5 Brisbane Sewer Reticulation System Renewals Program

Background

The Sewer Reticulation Renewals Program aims to achieve the reliable transportation of sewage from the reticulation networks to STPs without negative impacts on the community and the environment.

The reticulation sewer mains renewals programs covers all QUU regions, however the Brisbane region was selected for review due to the size of the program relative to other regions.

SKM's review for the current price monitoring period focused on the program of works undertaken in Brisbane in 2012-13 and 2013-14 ($12.06 million) as these works will be commissioned the year after the expenditure is incurred (Table 26).

Table 26 Brisbane Sewer Reticulation Renewals Program - as-incurred expenditure 2012-13 to 2014-15 ($m)

	2012-13	*2013-14*	*2014-15*
	4.53	7.53	4.33
2012-13 and 2013-14	**12.06**		**N/A**
2013-14 and 2014-15	**N/A**	**11.86**	

Source: QUU supporting information (May 2013).

Prudency

QUU identified renewal as the driver for this program.

SKM found the project to be prudent as the primary driver of renewal was demonstrated through the supporting documentation provided by QUU. Further, SKM considered that the standards used for this project were appropriate.

Efficiency

QUU included $12.06 million in the budget for the program. Of this amount, $4.53 million incurred in 2012-13 will be commissioned in 2013-14 and $7.53 million incurred in 2013-14 will be commissioned in 2014-15.

The tendering of projects within the program, through a standing offer arrangement, ensures the costs are consistent with prevailing market conditions.

[24] QUU intends to replace 400 meters in Somerset in each of 2012-13 and 2013-14 (QUU supporting information (June 2013)).

SKM considered QUU's use of a cost estimation database which is periodically reviewed and updated to reflect changes in market conditions to be a satisfactory method of determining costs estimates.

However, the project was found not to be efficient as the project management costs allowances were excessive. SKM recommended a reduction in project costs of $3.16 million from the original budget costs ($395,000 in 2013-14 and $2.77 million in 2014-15).

Policies and Procedures

The Sewer Reticulation Renewals Program has not followed the 'toll gate' or 'gateway' review process. SKM noted the original budget for this program exceeded the $5m threshold for major projects - which are subject to gateway reviews - but that expenditure for 2012-13 and 2014-15 were below the threshold and therefore the classification as 'minor' was appropriate.

SKM considered that the use of historical costs as a basis to develop the capital budget was an appropriate process for a rolling program as these costs will be the most relevant.

Similar to the Brisbane Water Meters Renewals Program, SKM highlighted the absence of a benefits realisation review in QUU's policies and procedures and observed that there are potentially opportunities for the program to become more efficient over time which are not being realised.

Conclusion

Table 27 below shows the expenditure profile for this program.

Table 27 Brisbane Sewer Reticulation System Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	4.53	7.53	12.06
SKM Adjustment	N/A	-0.40	-2.77	-3.16
QCA Recommended	N/A	4.13	4.76	8.90

Note: Capital expenditure as-incurred in the year before commissioning. Source: SKM (2013b).

The savings identified by SKM can be extrapolated to the Ipswich, Lockyer Valley and Somerset Sewer Reticulation System Renewals Programs. The tables below show the extrapolated savings (totalling $97,603) for these programs.

Table 28 Ipswich Sewer Reticulation System Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.318	0.517	0.835
SKM Adjustment	N/A	-0.028	-0.045	-0.073
QCA Recommended	N/A	0.290	0.472	0.762

Note: Capital expenditure as-incurred in the year before commissioning. Source: SKM (2013b).

Table 29 Lockyer Valley Sewer Reticulation System Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.130	0.00	0.130
SKM Adjustment	N/A	-0.011	0.00	-0.011
QCA Recommended	N/A	0.119	0.00	0.119

Note: Capital expenditure as-incurred in the year before commissioning. Source: SKM (2013b).

Table 30 Somerset Sewer Reticulation System Renewals Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	N/A	0.153	0.00	0.153
SKM Adjustment	N/A	-0.013	0.00	-0.013
QCA Recommended	N/A	0.140	0.00	0.140

Note: Capital expenditure as-incurred in the year before commissioning. Source: SKM (2013).

4.6.6 Brisbane Flood Resilience Program

Background

Following the January 2011 flood event which resulted in a loss of electrical and control infrastructure in many of QUU's sewerage assets, a flood resilience study identified at-risk STPs and 20 of the most critical sewerage pump station sites for further investigation.

The Brisbane Flood Resilience Program covers the Oxley, Fairfield and Karana Downs STPs. Expenditure on the Oxley STP comprises 78% of as-incurred expenditure[25] for the review period and was therefore reviewed by SKM. The work at the Oxley STP involves modification to key electrical and mechanical assets to minimise down time in the event of another flood of the same magnitude as experienced in 2011.

QUU submitted that the expenditure (as-incurred) on the project would be $18.64 million in 2013-15. QUU submitted that expenditure of $11.36 million will be commissioned in 2013-15.

Prudency

QUU identified the drivers for this project as improvement and renewal.

In March 2012, the Queensland Floods Commission of Inquiry recommended authorities responsible for the management of sewerage infrastructure conduct a review of their existing infrastructure to identify electrical infrastructure that may be vulnerable to inundation and perform risk and cost/benefit assessment to determine if it should be relocated to a higher level.[26] SKM noted that QUU has undertaken a risk and cost/benefit analysis as recommended by the Commission and that this informed the decision to undertake the project.

QUU's analysis was underpinned by assumptions on insurance cost increases which would be incurred if no action were taken to reduce flood exposure.

SKM determined that the project is prudent.

[25] As per the minor capital project submissions for the three STPs.
[26] Refer to Recommendation 10.3, Queensland Floods Commission of Inquiry Final Report.

Efficiency

SKM stated the capital expenditure on new assets would result in an extension of asset life with the relocation of assets to higher levels resulting in reduced recovery costs in the event of a flood.

SKM queried the approach to assets (with remaining useful life) to be made redundant as a result of the project. QUU stated that these will be:

(a) kept as a spare unit for use elsewhere (may need to be refurbished)

(b) used for spare parts

(c) sold as is, or refurbished and sold, in accordance with QUU policy on disposal of assets.

SKM considered the plan for redundant assets to be the best approach for managing the situation and, given the value of new mechanical and electrical equipment for the project is just under $3 million, applied a 10% saving of $293,500 to the project.

For the flood resilience work at the Fairfield and Karana Downs STPs:

(a) the key driver is that same as for Oxley STP

(b) it appeared that the a similar process was followed for the solution development

(c) the project delivery will be the same as for Oxley STP as the concept and detailed design have been awarded as a package for all three plants

(d) the standards of service to be used are the same

(e) a similar process appears to has been used for the development of costs for the budget and the costs will be subsequently market tested.

Applying a similar 10% reduction in costs to manage redundant equipment, SKM recommended reducing costs by $10,000 at Fairfield and $15,000 at Karana Downs STP.

The total savings across the three plants sum to $318,500.

A similar 2.8% saving was recommended by SKM for flood resilience programs in Ipswich and Somerset.

Policies and Procedures

SKM found the documentation provided is in line with QUU's policies for a minor project.

This project has demonstrated no deficiencies in QUU's overall policies and procedures.

Conclusion

Table 31 below shows the expenditure profile for the Brisbane Flood Resilience Program.

Table 31 Brisbane Flood Resilience Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	0.00	11.36	7.28	18.64
SKM Adjustment	0.00	-0.32	0.00	-0.32
QCA Recommended	0.00	11.04	7.28	18.32

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

The savings extrapolated to the Ipswich and Somerset Flood Resilience Programs ($115,135 and $8,755 respectively) are shown in Table 32 and Table 33 below.

Table 32 Ipswich Flood Resilience Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	0.00	0.54	3.57	4.11
SKM Adjustment	0.00	-0.02	-0.10	-0.12
QCA Recommended	0.00	0.52	3.47	3.99

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

Table 33 Somerset Flood Resilience Program ($m)

	Previous years	*2013-14*	*2014-15*	*Total*
QUU Proposed	0.00	0.31	0.00	0.31
SKM Adjustment	0.00	-0.01	0.00	-0.01
QCA Recommended	0.00	0.30	0.00	0.30

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

4.7 Adjustments to sampled projects

On the basis of SKM's detailed review of six sampled projects, the QCA has reduced 2013-15 expenditure in respect of five projects, as per Table 34 below. The overall reduction of $27.46 million (17.1% of the sampled expenditure) is predominantly due to a deferral of $22.63 million for a project to be commissioned after 2013-15.

Table 34 Review of Capital Expenditure for 2013-15 ($m)

Project	*SKM Assessment*			*Expenditure**		
	Prudent	*Efficient*	*Comment*	*QUU*	*SKM*	*QCA*
1. Brisbane Woolloongabba Sewer Catchment Augmentation	Yes	Yes	Prudent and efficient.	79.57	0.00	79.57
2. Brisbane Bartleys Hill / Wellers Hill Zone Connection Including Twin River Crossing	Yes	No	To be commissioned after the 2013-15 review period.	22.63	-22.63	0.00
3. Ipswich Bundamba Creek Trunk Gravity Main Implementation Stage 1a and 1b	Yes	No	Excessive contingency allowances.	14.10	-0.80	13.30
4. Brisbane Water Meters Renewals Program	Yes	No	Lower unit rates for meters and 5% saving for procurement method.	13.99	-0.55	13.44
5. Brisbane Sewer Reticulation System Renewals Program	Yes	No	Error in calculation of costs and high project management costs.	12.06	-3.16	8.89
6. Brisbane Flood Resilience Program Sewage Treatment Plants	Yes	No	Minor adjustments for resale value of existing assets.	18.64	-0.32	18.32
Total				**160.99**	**-27.46**	**133.53**

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

In addition to the $27.46 million reduction in capital expenditure, extrapolated savings of $0.247 million were applied to the water meters renewals ($25,253), sewer reticulation renewals ($97,603) and flood resilience ($123,890) programs in QUU regions outside Brisbane.

To translate the as-incurred adjustments of QUU's capital projects into as-commissioned adjustments, the QCA relied on QUU's commissioning model for the 2013-15 period. However, this model contained hard coded values, rather than formulae, in the worksheet for the 2013-14 and 2014-15 financial years, so it was not possible for the QCA to calculate the commissioned value of adjustments. Because the full value of the Brisbane Bartleys Hill / Wellers Hill Zone Connection Including Twin River Crossing project was deferred until after the monitoring period, the QCA was able to identify and apply the as-commissioned adjustment ($23.47 million) to the MAR. For all other projects, the as-incurred adjustments were applied to the as-commissioned values in the data template, meaning the savings were under-reported. Given the river crossing project accounts for more than 80% of the total adjustment to sampled projects, the QCA does not consider this issue to have had a material impact on QUU's MAR.

4.8 Capitalised interest

In support of its submission, QUU provided the QCA with its capital works commissioning model. This model translates expenditure as-incurred for capital works into commissioned expenditure by capitalising interest at the WACC to the year of commissioning.

The commissioning model contained a WACC of 6.64% to capitalise interest in the RAB roll forward calculation. QUU advised that the 6.64% was an estimate for 2013-15 made by QUU and was mistakenly not updated by QUU after the QCA's January 2013 advice that the WACC for the review period is 6.57%.

The QCA adjusted QUU's capital expenditure data for the correct WACC, leading to a reduction in capital expenditure of $0.12 million over 2013-15.

4.9 Policies and procedures

Capital expenditure planning from 2010 to 2013

In previous reviews, the QCA reported on QUU's approach to capital planning. Table 35 below summarises the QCA's key findings from its previous reports.

Table 35 QUU's capital planning - 2010 to 2013

Year	*QCA's capital planning findings*
2010-11	The QCA commented that the Brisbane and Ipswich districts had well defined policies and procedures which were in line with good industry practice and that QUU was working to review policies and procedures in other districts. The QCA supported initiatives to allow for: (a) the consideration of capital expenditure and operating costs from a regional perspective (b) only commissioned capital expenditure to be included in the RAB and therefore prices (c) standardised cost estimating, including for contingency, preliminary and general items, design fees and contractor margins (d) a summary document for major projects to facilitate standardised reporting (e) an implementation strategy for each major project which includes recommendations on delivery methodology, program and a risk review process (f) 'gateway' reviews to be undertaken at milestone stages for selected projects.
2011-12	The QCA outlined QUU's multi-level approach to capital planning and its corresponding participation in the IWA/WSAA 2012 Asset Management Performance Improvement Project (WSAA asset management project). The QCA reported progress against the initiatives outlined in its previous review.
2012-13	The QCA outlined the WSAA asset management project which benchmarked QUU's asset management practices against other participating water authorities[27]. QUU's identified areas of strength included corporate policy and planning and asset capability and forward planning. Priority improvement opportunities included implementing a strategic asset management framework, improving the relationship between asset performance, cost, level of service and price, improving key performance indicators and reporting, and post-activity review. The QCA continued to note progress against the initiatives outlined in its previous reviews.

Source: QCA (2011), QCA (2012), QCA (2013a).

Capital expenditure planning from 2013 to 2015

The assessment of capital expenditure during the price monitoring period also takes into account the robustness of the capital expenditure program planning and delivery processes and procedures in an overall sense, and identifying any areas for improvement. This review is conducted with respect to good industry practice.

SKM reviewed whether QUU'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

[27] GHD, Marchment Hill Consulting and CH2MHill (2012).

(g) whether the asset management system is consistent with Publicly Available Specification 55 - Asset Management (PAS-55)[28] or similar

(h) procurement and other delivery processes.

SKM's review is summarised below.

Standardised approach to cost estimating

For major projects, an independent cost estimate is required, and a spread sheet template on QUU's intranet is required to be used. This satisfies the requirement for major projects and is robust.

The Feasibility Report Template for major projects requires a "Project Abstract" which fulfils the requirement for a summary document and was found by SKM to be robust.

The Minor Capital Project Submission Guidelines and Template requires a "Project Abstract" which fulfils the requirement for a summary document and was found by SKM to be robust.

Gateway review

QUU's risk management framework adopts a similar process for project evaluation and approval to the Gateway process, with five key review points or gates:

(a) Needs analysis

(b) Investment decision

(c) Procurement strategy

(d) Contract award and

(e) Project debrief.

SKM concluded this framework aligned with the Gateway process, with the exception that it does not provide for a benefits realisation review once a project has been completed and the benefits have been, or are being, realised and measured against a baseline. QUU advised that it plans to develop and implement a benefits realisation process.

SKM concluded that QUU's process does not yet fully meet the requirement of a gated review process that is in keeping with good industry practice.

Detailed analysis of options for major projects

The Feasibility Report Template for major projects requires a detailed analysis of options which meets this requirement of the Gateway process, and was found by SKM to be robust.

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

QUU's commissioning model translates capital expenditure as-incurred to as-commissioned using the WACC. The commissioned value is reflected in the QUU data templates which are used by the QCA to roll forward the RAB.

Compliance

Table 36 below shows SKM's review of key QUU documents governing major capital expenditure.

[28] PAS-55 is published by the British Standards Institution.

Table 36 QUU compliance with legislation

Document	*SKM Assessment*
Queensland Urban Utilities Corporate Plan 2012-2017	Compliance is specifically addressed.
Queensland Urban Utilities Water Netserv Plan Part B	Regulatory compliance is addressed in Appendix C (major requirements are listed and explained).
Queensland Urban Utilities Capital Planning and Delivery Process and Governance Arrangements	"Legislation, regulations, guidelines, codes" are specifically addressed. Sources on the QUU intranet are referenced.
Audited financial statements for 2011-12[29]	The audit opinion given on 31 August 2012 and was unqualified. This signified that the Queensland Audit Office did not discover any significant instances of non-compliance with the *Financial Accountability Act 2009* (Qld), the Financial and Performance Management Standard 2009 (Qld) or the State Procurement Policy[30]. A high level review of the entity's policies found that they included the relevant requirements.

Source: SKM (2013b).

Considers regional perspective

SKM noted that the DR Act requires SEQ service providers to prepare Water Netserv Plans by 1 March 2014.[31] An entity's Water Netserv Plan must indicate how the entity plans to achieve effective outcomes for the provision of water and sewerage services in the entity's area and the SEQ region.

Further, the Bulk Water Supply Code (DEWS 2013b) 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.

SKM reviewed QUU's Water Netserv Plan and noted section 6.1 specifically required QUU to:

(a) align with the growth projections in the SEQ Regional Plan

(b) ensure its planning is consistent with the SEQ Regional Water Supply Strategy

(c) give due consideration to the Healthy Waterways Strategy and deliver the SEQ Regional Water Quality Management Strategy

(d) liaise and coordinate with the [SEQ Water] Grid Manager[32] and

(e) continue to participate in regional forums to ensure a coordinated response to water quality issues.

SKM further identified that section 5.2 of QUU's capital planning and delivery arrangements also addresses regional issues.

SKM concluded that these documents demonstrated compliance with this requirement and were robust.

[29] The 2011-12 financial statements were the most recently available at the time of SKM's assessment.
[30] The Queensland Government introduced a new procurement policy on 1 July 2013 (refer to the Department of Housing and Public Works for more information).
[31] Section 99BJ.
[32] The SEQ Water Grid Manager ceased operation on 1 January 2013.

QUU 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.[33]

The QCA notes that, while these documents commit QUU to participating in regional initiatives to achieve the objectives stated in the DR Act, they do not provide evidence of the detailed implementation or actual regional outcomes achieved. 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

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

A similar draft ISO standard is being developed, *Draft International Standard ISO/DIS 55001 Asset management - Management systems - Requirements* (ISO 55001). QUU advised that it was aligning its systems with the ISO standard, and its objective was to comply with this standard once it is finalised. Therefore, SKM undertook the review against ISO 55001 rather than PAS-55.

Although SKM noted QUU has an asset management improvement plan in place, SKM identified a range of non-compliances of QUU's asset management system against the requirements of ISO 55001 and found QUU's asset management systems were not consistent with good industry practice.[34]

In respect of the WSAA asset management project, SKM noted that this benchmarking program uses self-assessment, with subsequent review and validation by external consultants. The results are compared against those of other participating water authorities, not against a published standard of requirements for good industry practice. The relative results will therefore vary dependent on the other authorities participating.

Procurement

QUU stated it has an active program to identify procurement-related savings in materials and services costs and thereby contribute to, or exceed, a three-year savings target of 10% in materials and services. Procurement-related savings opportunities identified in materials and services costs include:

(a) implementing vendor managed inventory

(b) bundling of multi-year maintenance contracts so providers can reduce the risk margin built into their prices

(c) competitive supply of minor capital works such as sewerage connections

(d) improved facilities management and fleet management

[33] Logan City Council supporting information (2013).
[34] Refer to SKM (2013b) section 3.3.4.

(e) co-sourcing electricity with utilities having complementary demand profiles[35].

Other processes

SKM identified and reviewed the key phases of QUU's capital expenditure program and delivery processes, as articulated in the capital planning and delivery arrangements document and Water Netserv Plan - Part B.

From its review, SKM considered these processes to be robust and in line with good industry practice as they:

(a) reflect strategic development (for example, references to the corporate plan)

(b) are based on a gateway system

(c) are consistent with regional priorities (including references to the SEQ Regional Plan).

SKM identified opportunities to improve processes through the adoption of risk based costing (for example, through use of Monte Carlo analysis or equivalent) for more complex and larger cost projects and (re-stated) the absence of formal Gate 5 Project Review and Closure documentation that should include a benefits realisation review.

Summary of findings on policies and procedures

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

For example, SKM found that QUU needs to develop its benefits realisation and improve compliance with asset management standards. QUU has plans in place to do so.

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

4.10 Summary of adjustments for 2013-15

The effects of the QCA adjustments (reductions in sampled projects and the capitalisation of interest at 6.57% instead of 6.64%) to capital expenditure are shown below.

Table 37 Comparison of QUU's and QCA's capital expenditure as-commissioned

	2013-14	***2014-15***
QUU's proposed capital expenditure	323.23	421.39
QCA adjustments		
- for reduction to sampled capex	-2.00	-26.55
- for capitalisation at 6.57%	-0.03	-0.10
Total capital expenditure	**321.20**	**394.75**

Note: Table may not add due to rounding. Source: QCA adjustments using QUU commissioning model.

[35] SKM's subsequent discussions with Seqwater indicated that this may not be an option for it, but it may be for other utilities.

4.11 Contributed, Donated and Gifted Assets

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

Under legislation, a maximum charge applies for capital contributions (for water, sewerage, transport and public parks). For example, the cap for a three-bedroom dwelling is $28,000 (DSDIP 2013). The maximum charge remains in place while a review of infrastructure planning and charging is underway by the Department of State Development, Infrastructure and Planning (DSDIP 2013). QUU (and Unitywater) receive a proportion of the maximum charge levied by their participating councils. This will be replaced with a utility model, similar to that for electricity or telecommunications suppliers, from 2014.

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.

QUU's submission

QUU noted the basic principle in setting the allowable revenue for prices is that those prices should seek to only recover costs that have been incurred by the entity. Assets funded through contributions by developers should not be included in costs to be recovered from customers. QUU noted there were two methods of excluding these contributions:

(a) revenue offset, where all assets are included in the RAB and the MAR is reduced by the contributions in that year

(b) asset offset where the RAB is reduced by the value of contributions and the MAR is fully recoverable through ongoing prices.

QUU noted that each method results in the same revenue impact in the long term for the business, although there is a short term impact on the MAR, as the offset is completed at different stages of the calculation.

Over 2010-13, QUU adopted the revenue offset approach to account for capital contributions. In 2013-15, QUU has adopted the asset offset approach, as it impacts on the RAB and is better suited to lessening the volatility associated with forecasting contributions.

QUU submitted it will receive $125.5 million in contributed assets and $169.9 million in capital (cash) contributions over 2013-15. QUU noted that it applied the same forecasting methodology as in its 2012-13 submission.

Table 38 QUU contributed assets and capital contributions ($m)

	2010-11	***2011-12***	***2012-13***	***2013-14***	***2014-15***	***2013-15***
Contributed Assets	55.50	43.85	55.60	60.39	65.06	**125.45**
Capital Contributions	87.03	81.84	62.09	82.99	86.92	**169.90**
Total	**142.53**	**125.69**	**117.69**	**143.38**	**151.98**	**295.36**

Source: QUU (2013e).

QUU noted that capital contributions for 2012-13 were $62.09 million, down $20.0 million on the 2012-13 budget of $82.09 million[36]. However, QUU has adopted a conservative approach in its current forecasts, assuming a return to more normal levels of contributions in 2013-15.

QCA's analysis

The QCA accepts QUU's change to the asset offset approach to the treatment of capital contributions, as required under the Ministerial Direction. The QCA notes its previously stated preference for the asset base offset approach for a range of reasons including that the resulting revenue benchmark is more stable (see page 63 of QCA 2010 SEQ Interim Price Monitoring Framework Final Report).

The QCA has previously reviewed QUU's methodology to forecast contributed assets and capital contributions and found it reasonable in the circumstances. As in previous reviews, the QCA notes that QUU should seek to improve its data collection and forecasting.

The QCA accepts QUU's forecasts of contributed assets and capital contributions. The higher the estimated contributions the lower the portion of costs that needs to be recovered from charges.

4.12 Return on assets

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

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

QUU adopted the benchmark WACC of 6.57%, although noting it had concerns with the QCA's methodology and it would prefer a longer-term approach that reduces volatility. QUU noted it would put its views forward as part of the concurrent industry-wide review of WACC being undertaken by the QCA.

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.[37] To estimate inflation, the Ministerial Direction requires the QCA to use the annual March to March ABS CPI (all groups, Brisbane). Both QUU and the QCA have used the same estimates to index the RAB.[38]

QUU'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 is the same, the difference relates to the differences in the RAB.

[36] Refer to section 8.5.2 of QUU's 2012-13 interim price monitoring submission, available on the QCA's website.
[37] 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).
[38] As per the Information Requirements for 2013-15, the indexation is 2.0% for 2008-09, 3.2% for 2009-10, 3.6% for 2010-11, 1.3% for 2011-12, 2.1% for 2012-13, and 2.5% for 2013-15.

Table 39 Return on capital ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	QUU	**QCA**	**QUU**	**QCA**	**QUU**	**QCA**	**QUU**	**QCA**
Gross return on capital	126.43	125.81	193.32	191.88	129.71	127.71	202.14	199.22
Less indexation	-48.12	-47.86	-73.56	-72.99	-49.39	-48.58	-76.98	-75.78
Return on capital	78.31	77.96	119.76	118.90	80.32	79.13	125.16	123.44

Source: QUU (2013e), QCA calculations.

4.13 Capitalisation of past under-recovery

In its 2013-15 submission, QUU specified the scope, quantum and treatment of past under-recovery to be potentially recouped in the future. QUU limited its claim to the under-recovery arising solely from the price cap legislation and from the 2011 flood.

Under-recovery due to the price cap

QUU Submission

QUU submitted that the State Government's CPI price cap for distribution and retail water and sewerage charges in 2011-12 and 2012-13 created a unique situation whereby a policy decision led to the business under-recovering in relation to MAR for these two years. As a result, QUU proposed to capture and capitalise the price cap under-recovery for these two years.

QUU stated that as the QCA will only consider the treatment of under-recoveries when actual (audited) information is available, it has only captured under-recoveries for 2011-12. QUU proposed to adopt a consistent approach for 2012-13, once actual information is available.[39]

In calculating the under-recovery in 2011-12, QUU recognised that it announced price increases that were below the CPI price cap. QUU stated this decision was made after considering a number of factors, including the impact on customers and the bulk water price increases.

To take this into account, QUU captured the under-recovery in excess of the imposed price cap; that is, the amount that was completely attributable to the price cap. To calculate this amount, QUU:

(a) adjusted its actual revenue in 2011-12 to the upper limit of the price cap – an increase of $9.5 million to $790.4 million – to reflect that QUU set prices for 2011-12 that were below the cap

(b) adjusted the QCA MAR for 2011-12 to reflect actual demand, bulk water purchases and capital revenues – a net increase of $17.1 million to $823.8 million

(c) noted that other operating expenses (such as chemicals and electricity) would also vary from changes to demand, however the impact of adjusting these expense items for changes in demand would be immaterial. However, QUU proposed that this process should occur once the actual 2012-13 under-recovery is known

[39] Actual information from 2012-13 was not available at the time QUU set prices for 2013-14.

(d) subtracted the adjusted revenue (a) from the adjusted MAR (b), to calculate the under-recovery due to the price cap – $33.9 million.

QUU stated that it capitalised the under-recovery of $33.9 million with an asset life of 10 years, so that any decision to incorporate the under-recovery will not have a significant impact on consumers.

Previous Reviews

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

However, in its past submissions, QUU sought clarification of the treatment of under or over-recoveries (2010). QUU advised it may wish to put forward an unders and overs mechanism to recoup past under-recoveries including from the price cap (2011, 2012).[40]

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

However, the QCA also noted that:

(a) an NPV neutral glide path is not always possible, particularly in the context of significant price increases, without prices in the final year being substantially in excess of their efficient level, requiring transitioning (down) in the next period

(b) under a price monitoring framework in which the objective is to constrain the exercise of market power in a light-handed manner, under-recovery may be the legitimate exercise of QUU's discretion to forego these revenues and accept a lower rate of return. Where this does not jeopardise the financial viability of the entity this is a legitimate business decision. The QCA noted that QUU had not priced to the level of the cap in 2011-12 and 2012-13 and it would appear QUU had exercised its discretion and not been constrained by the cap in these years (2013).

In previous reviews, the QCA was not in position to provide guidance on any particular under and overs regime or glide path as it was not provided with a detailed proposal and the underpinning data, modelling and assumptions. In particular, the level of over-recovery sought in the later years of the scheme was not provided. The appropriateness of a glide path typically hinges on this longer term information. The QCA calculated annual stand-alone MARs pending this detailed information.

The QCA did not specifically address the possibility of recovering revenues foregone due to the legislated price cap.

[40] At the time the price cap was introduced, SEQ councils as owners of the entities were also required to publish a price mitigation plan for how they intended to mitigate price impacts on customers after the two-year CPI price cap period. (Subsequently, the deadline for publication was extended and eventually the requirement for a price mitigation plan was abolished by the State Government.) BCC's price mitigation plan does not state an intent to recoup past under-recoveries (or to forego these revenues).

QCA Analysis

The QCA notes that, if QUU is allowed to recoup past under-recovery due to the price cap, this dilutes the benefit of the price cap to consumers over time. Lower prices during the price capped period are recouped through higher prices in future.

Whether this is consistent with the spirit and intent of the price cap legislation – to which the QCA is required to give effect – is a key issue.

The QCA has reviewed the CPI cap legislation and the material which can be used to interpret the legislation. None of this material explicitly prohibits the entities from recouping past under-recovery in future prices.

However, it does indicate that the policy intention of the legislation was to provide certainty about lower water prices and bills to residential and small business customers in 2011-12 and 2012-13:

(a) 'the primary intent of the Bill is to implement the price cap policy announced in Parliament by the Premier and Minister for Reconstruction on 7 April 2011, in order to address community concerns about the significant increases in water and sewerage prices and the level of accountability for setting water and sewerage prices in SEQ'.[41]

(b) '...to constrain ... price increases to a CPI increase per annum for residential and small business customers from 1 July 2011 to 30 June 2013...' [42]

(c) 'What this means for households and small businesses is *genuine reductions* to what was proposed by distributor-retailers for the 2011-12 financial year'[43] [emphasis added]

(d) 'the bill before the House will provide price relief to households and small businesses in South-East Queensland by imposing a CPI cap...'[44]

(e) 'in 2011-12 this will slash $125 off the typical water and sewerage bill for Gold Coast residents using 200kl per annum. On the Sunshine Coast, residents will save $102, and in the greater Brisbane area the savings will be $36'[45]

(f) 'This legislation will deliver definitive action to cap the rising water and sewerage prices proposed by the Council-owned distributor-retailers... While prices in Brisbane will still increase, they would have been much higher had we not imposed the CPI cap'[46].

Taking this material into account, it is the QCA's view that to allow QUU to potentially recoup the under-recovery due to the price cap would not be consistent with the spirit and intention of the relevant legislation. To allow QUU to charge more in later years to make up for the price cap in 2011-12 and 2012-13 would leave customers no better off in NPV terms.

Therefore, the QCA has not included any past under-recovery due to the price cap in its estimate of prudent and efficient costs for 2013-14 or 2014-15.

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[41] Explanatory notes to the Fairer Water Prices for SEQ Amendment Bill 2011, p.3.
[42] Explanatory notes to the Fairer Water Prices for SEQ Amendment Bill 2011, p.3.
[43] Second Reading Speech by the Minister for Energy and Water Utilities 12 May 2011.
[44] Second Reading Speech by the Minister for Energy and Water Utilities (resumed) 17 June 2011.
[45] Ministerial Statement by the Minister for Energy and Water Utilities, 7 April 2011.
[46] The Hon Stephen Robertson, Minister for Energy and Water Utilities, Media release 9 May 2011 'Water price protection for householders'.

Under-recovery due to the 2011 flood

QUU's Submission

Given its treatment of under-recovery due to the price cap, QUU also decided to adopt a similar approach to the treatment of under-recovery due to the 2011 flood.

QUU noted this was a change from its approach in previous submissions, where QUU had excluded these costs until it was known whether there would be a material difference between the costs incurred and the insurance payout.

In its 2013-15 submission, QUU proposed to capture and capitalise the flood under-recovery. QUU stated that any revenue received through insurance or national disaster relief arrangements would be provided back to customers using the same mechanism.

QUU calculated the under-recovery due to the 2011 flood as $34.6 million.

QCA Analysis

The price cap legislation does not prohibit QUU from recouping the net costs (under-recovery) due to the 2011 flood, which occurred in early 2011 when the price cap was not in place.

In principle, it is reasonable to allow QUU to potentially recoup the costs of a flood event that was outside its control, so long as the costs are prudent and efficient and offset by any insurance payouts. In this respect:

(a) SKM's review of the prudency and efficiency of the Brisbane Flood Resilience Program (see section 5.5.6) found some (minor) savings could be made from the sale or reuse of flood affected assets. The QCA has accepted SKM's finding in its capital expenditure review

(b) claims on insurance and disaster relief must be finalised and revenues offset against the flood costs. This provides the right incentive for QUU to pursue these claims as the costs are not passed through to customers until this is finalised and evidence provided. The net costs can then be reviewed.

The QCA therefore accepts QUU's proposal to capture under-recovery due to the 2011 flood, as this was an event outside its control, subject to the conditions noted above being met. Pending evidence of prudency and efficiency and the finalisation of all claims, the QCA has excluded these costs. The nature and extent of the evidence required to demonstrate prudency and efficiency will depend on the materiality and contentiousness of the issues, in this case it can be expected to involve information to support a view that:

(a) QUU held appropriate and efficient insurances

(b) QUU has appropriately pursued insurance payouts and disaster relief and there is no further reasonable possibility of a payout or relief payment

(c) QUU acted prudently in advance of and in response to the floods so that the costs incurred are efficient.

It should be noted that this does not necessarily mean that these costs should automatically be recouped. Any adjustment to prices should be considered in light of the costs and other factors affecting prices and in particular the impact on customers. Ideally, prices should be set and smoothed over a longer period to avoid large annual variations.

Recouping under-recovery for other reasons

QUU has not sought to recoup any other under-recovery. This is consistent with the QCA's view that it is a legitimate exercise of QUU's discretion to forego revenues and accept a lower rate of return.

Treatment of allowable under-recovery

QUU sought to capture and capitalised under-recovery, by including it in the RAB and giving it a ten year life. In practice, QUU has achieved this by inflating the value of telemetry assets, as these have a ten year life.

A more transparent method of treating under-recovery would be by way of a separate unders and overs account.[47] This is consistent with the approach adopted in the electricity distribution sector (AER 2010). The issue of the treatment of unders and overs will be addressed as part of the QCA review of the regulatory framework to apply to SEQ entities after 1 July 2015.

4.14 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.

QUU's submission

As in previous years, QUU calculated depreciation for regulatory purposes using the straight-line method and using existing asset lives. The RAB value was grouped by region and asset class and depreciated using the average remaining asset life for each group. Depreciation was calculated based on the opening RAB plus the addition of 50% of each year's capital expenditure and following indexation. Under the asset offset approach applied by QUU from 1 July 2013, contributed assets and capital contributions are excluded from the RAB from that date.

In its 2013-15 submission, QUU has also proposed to capitalise $68.5 million of past under-recovery arising from the legislative price cap ($33.9 million) and the 2011 flood ($34.6 million). This is shown as a line item in the below roll-forward ($21.9 million for water and $46.6 million for sewerage).

[47] The options for the treatment of under-recovery were set out by Synergies in a paper commissioned by Unitywater in 2011.

Table 40 QUU asset base roll forward - water ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	1,560.33	1,641.67	1,733.82	1,806.10	1,852.12	1,887.76	1,948.63
Net additions	90.92	61.16	58.91	74.84	52.09	51.34	51.24
Under recovery	-	-	-	-	-	21.87	-
Indexation	32.12	53.51	63.48	23.97	39.44	48.12	49.39
Depreciation	-41.69	-42.93	-50.11	-52.78	-55.89	-60.46	-65.12
Establishment costs	-	20.41	-	-	-	-	-
Closing RAB	**1,641.67**	**1,733.82**	**1,806.10**	**1,852.12**	**1,887.76**	**1,948.63**	**1,984.14**

Source: QUU (2013d).

Table 41 QUU asset base roll forward - sewerage ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	2,384.72	2,408.83	2,529.57	2,585.11	2,609.61	2,854.84	2,967.60
Net additions	71.48	122.69	73.28	104.44	310.58	128.50	218.17
Under recovery	-	-	-	-	-	46.63	-
Indexation	48.49	79.07	92.50	34.29	58.06	73.56	76.98
Depreciation	-95.85	-99.73	-110.23	-114.22	-123.41	-135.93	-146.47
Establishment costs	-	18.70	-	-	-	-	-
Closing RAB	**2,408.83**	**2,529.57**	**2,585.11**	**2,609.61**	**2,854.84**	**2,967.60**	**3,116.28**

Source: QUU (2013d).

QCA Analysis

The QCA applied straight-line depreciation and recognised the asset offset approach from 1 July 2013 in its RAB roll-forward. The QCA adopted the same indexation as QUU as noted above.

The QCA roll forward, reflecting prudent and efficient capital expenditure, indexation and depreciation is set out below. The QCA's closing RAB for 2013-15 is lower than QUU's, due to the QCA's reduction in QUU's proposed capex in 2013-15.

Table 42 QCA asset base roll forward - water ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	1,560.33	1,641.69	1,733.27	1,805.59	1,852.13	1,888.81	1,929.27
Capex	97.17	85.16	59.90	74.83	52.11	106.40	89.20
Under recovery	-	-	-	-	-	-	-
Indexation	32.12	53.51	63.46	23.96	39.44	47.86	48.58
Depreciation	-41.67	-43.50	-50.05	-52.25	-54.88	-58.33	-61.61
Disposals	-6.25	-3.59	-0.99	0.00	0.00	0.00	0.00
Capital contributions	-	-	-	-	-	-55.46	-61.58
Closing RAB	**1,641.69**	**1,733.27**	**1,805.59**	**1,852.13**	**1,888.81**	**1,929.27**	**1,943.85**

Source: QCA calculations.

Table 43 QCA asset base roll forward - sewerage ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	2,384.72	2,408.63	2,529.11	2,584.71	2,609.77	2,856.12	2,923.59
Capex	85.33	157.22	97.85	104.44	310.56	214.80	305.55
Under recovery	-	-	-	-	-	-	-
Indexation	48.48	79.07	92.39	34.28	58.07	72.99	75.78
Depreciation	-95.83	-100.21	-110.07	-113.66	-122.28	-132.40	-140.31
Disposals	-14.07	-15.61	-24.57	0.00	0.00	0.00	0.00
Capital contributions	-	-	-	-	-	-87.92	-90.39
Closing RAB	**2,408.63**	**2,529.11**	**2,584.71**	**2,609.77**	**2,856.12**	**2,923.59**	**3,074.17**

Source: QCA calculations.

4.15 Capital Costs

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

Table 44 Comparison of QUU and QCA Capital Costs ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	QUU	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*
Gross return on capital	126.43	125.81	193.32	191.88	129.71	127.71	202.14	199.22
Indexation	-48.12	-47.86	-73.56	-72.99	-49.39	-48.58	-76.98	-75.78
Net return on capital	**78.31**	**77.96**	**119.76**	**118.90**	**80.32**	**79.13**	**125.16**	**123.44**
Return of capital	60.46	58.33	135.93	132.40	65.12	61.61	146.47	140.31
Total capital costs	**138.77**	**136.29**	**255.69**	**251.29**	**145.44**	**140.74**	**271.63**	**263.75**

5 OPERATING COSTS

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 prudency and efficiency of QUU'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 prudency and efficiency of QUU'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 QUU's policies and procedures against good industry practice

(d) the treatment of bulk water costs as a pass-through item

(e) the prudency and efficiency of materials and services, employees (and contractors), corporate costs and electricity.

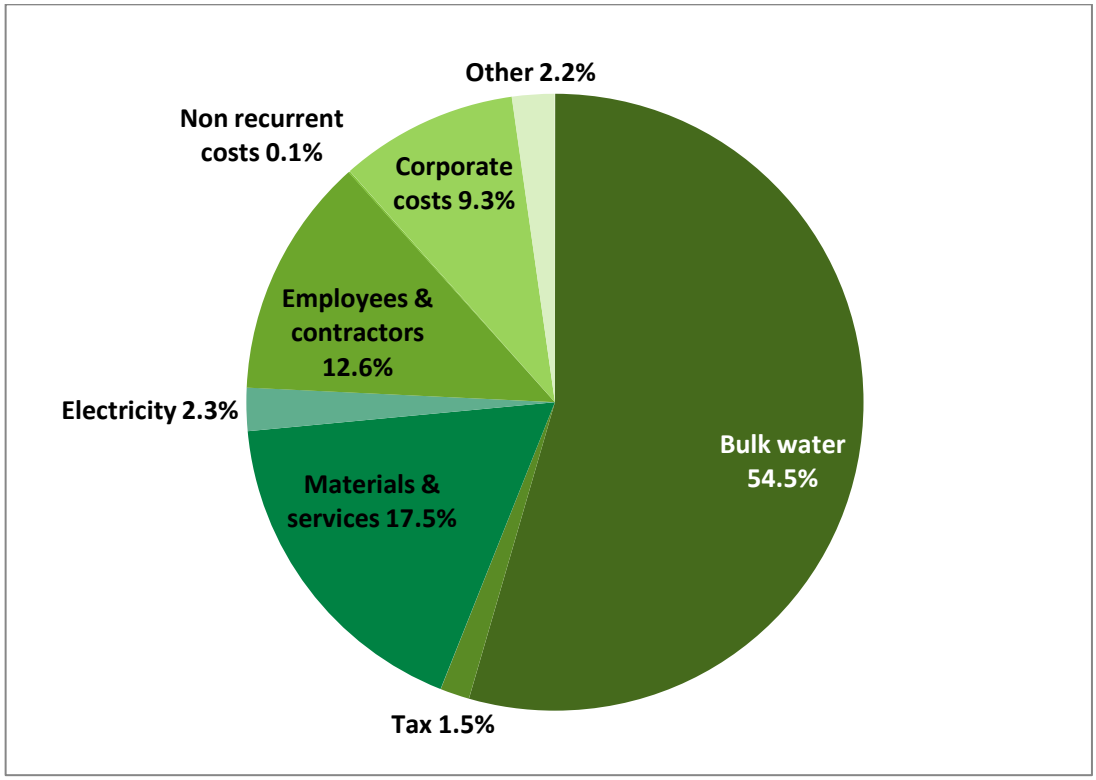
The QCA appointed SKM to assist in its assessment of operating and capital expenditure. As noted in the previous chapter, the terms of reference for SKM's review were consistent with the Direction and circulated to entities prior to the commencement of the review. SKM provided a copy of its draft report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

QUU submitted operating costs of $581 million in 2013-14 and $633 million in 2014-15. More than half of QUU's forecast operating costs over the 2013-15 period is the cost of purchasing bulk water from Seqwater (Figure 5).

Figure 5 QUU's operating costs 2013-15 ($m)



Source: QUU (2013e).

QUU's 2013-14 operating cost budget was based on a 'bottom-up' approach and an analysis of historical trends and efficiency opportunities. To develop its 2014-15 forecast, QUU extrapolated from the 2013-14 budget using growth indices, cost indices, efficiency forecasts and changes in new initiatives. Table 45 shows QUU's detailed operating cost forecast.

Table 45 QUU's forecast operating costs ($m)

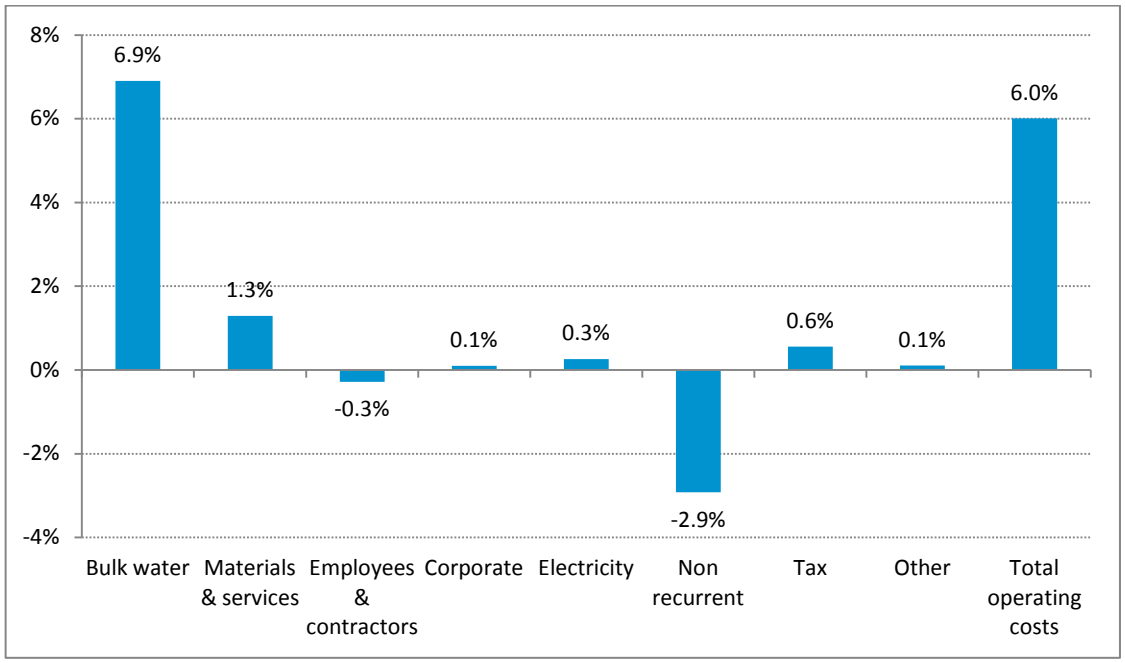
	2011-12	*2012-13*	*2013-14*	*2014-15*
Bulk water	224.19	271.41	309.28	352.32
Materials & services	87.65	98.31	105.40	106.66
Employees & contractors	82.63	77.58	76.03	76.93
Corporate costs	34.03	53.99	54.53	58.66
Electricity	10.28	11.51	12.93	14.49
Non recurrent costs	10.50	17.05	1.02	0.00
Tax	6.03	5.86	8.90	9.72
Other	11.40	12.74	13.32	13.85
Total operating costs	**466.72**	**548.46**	**581.41**	**632.63**

Note: excludes unregulated services. Source: QUU (2012b, 2013d, 2013e).

QUU's 2013-14 operating costs are 6.0% or $33 million higher than in 2012-13, due to a $38 million increase in bulk water costs (over which QUU has little control) being partly offset by a $5 million fall in distribution-retail operating costs. This fall is led by declining non-recurrent

costs due to the conclusion of QUU's separation of its ICT platforms from Brisbane City Council (Figure 6).

Figure 6 Contributions to change in operating costs 2013-14



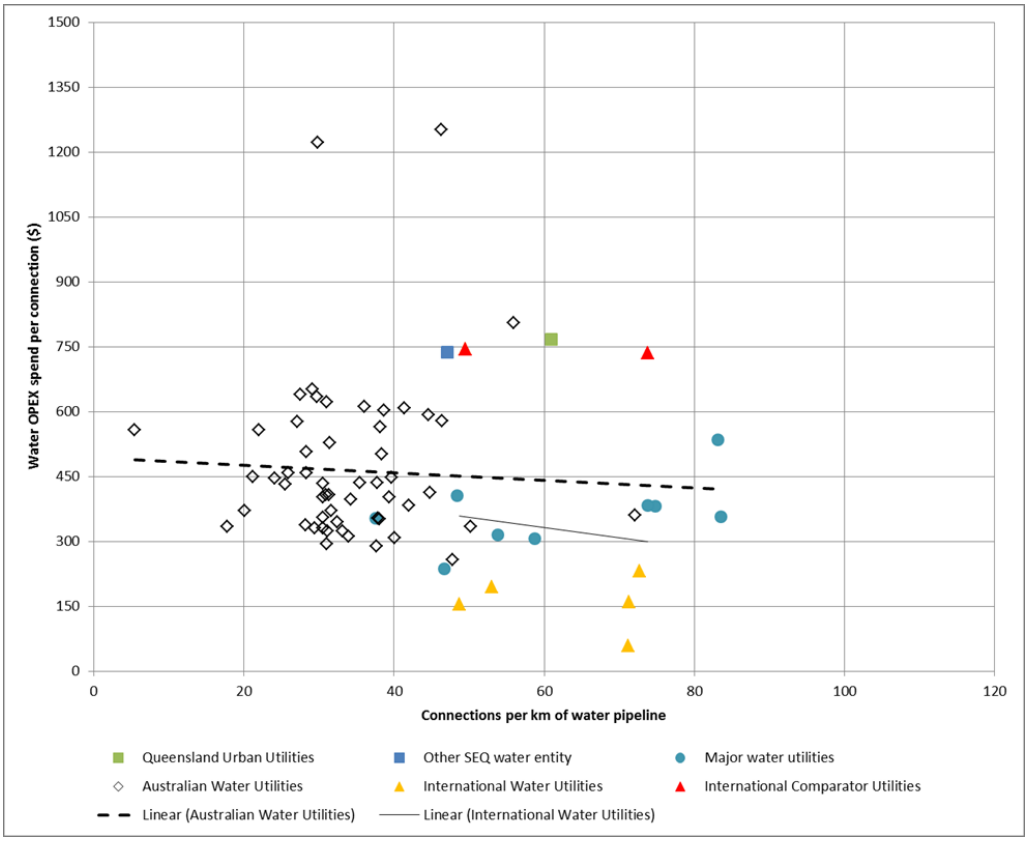
Source: QUU (2013e).

In its 2012-13 review, the QCA (2013a) recognised the work undertaken for QUU by Third Horizons to identify efficiency savings, and by QUU to achieve them. QUU has continued to pursue efficiency savings, and has recently established an efficiency program to pursue savings opportunities identified by PwC. The QCA supports the pursuit of savings and expects these to be realised in future operating cost budgets.

5.3 Benchmarking

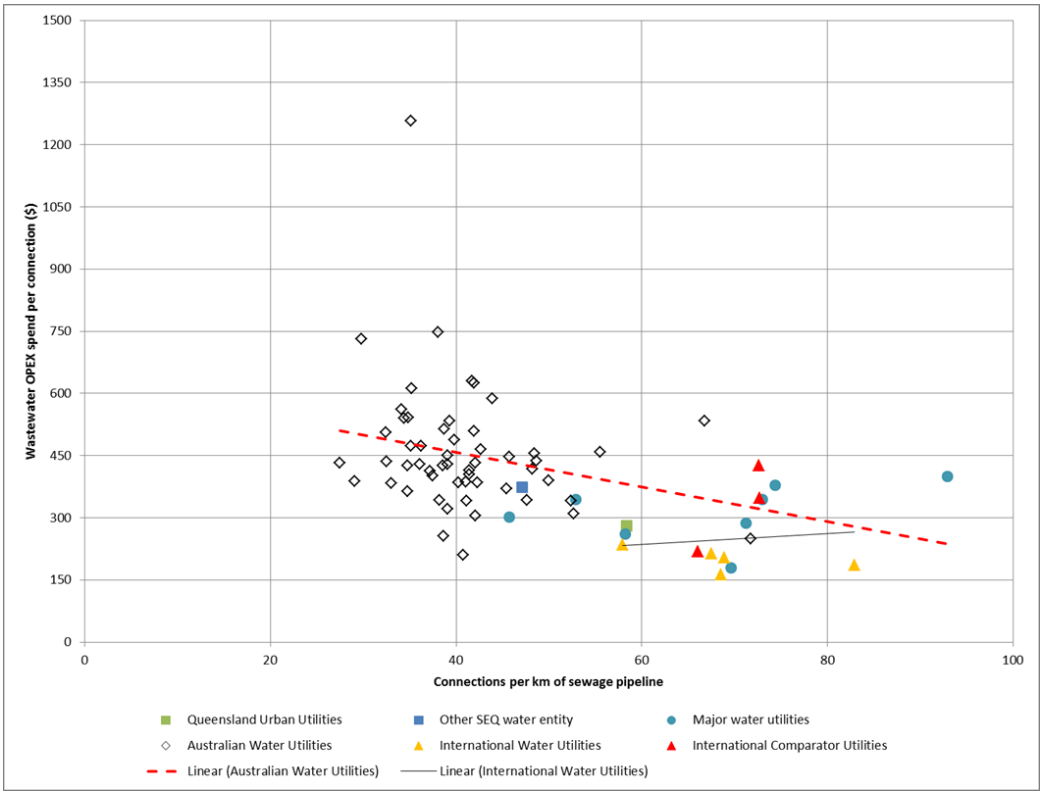
SKM conducted high-level benchmarking analysis drawing on international and domestic comparators (2013b). SKM concluded that QUU's water operating costs were higher than comparable entities, but its sewerage operating costs compared more favourably.

Figure 7 Water operating cost benchmarking



Source: SKM (2013b).

Figure 8 Sewerage operating cost benchmarking



Source: SKM (2013b).

5.4 Policies and planning

SKM (2013b) found QUU's policies and procedures for operating costs to be consistent with good industry practice. However, SKM found that QUU's asset management practices are not consistent with good industry practice (Table 46 below and section 4.9 above).

Table 46 Assessment of QUU's operating costs policies

Policy	*SKM assessment*	*Possible areas for improvement*
Legislative compliance	**Consistent with good industry practice and robust**.	
Regional perspective	**Consistent with good industry practice and robust.**	Realisation of benefits due to a regional perspective should be captured and reported.
Asset management	**Not consistent with good industry practice**. A range of asset management requirements have been assessed by SKM as not consistent with the ISO 55001 standard.	QUU has committed to the following improvements: • consolidation of asset system • potential adoption of ISO standards and • post activity review.
Procurement	**Consistent with good industry practice and robust.**	Could undertake post-implementation benefits realisation reviews of projects
Budget formation	**Consistent with good industry practice and robust.**	Could benchmark controllable operating costs against similar entities.

Source: SKM (2013b).

The QCA notes SKM's findings and notes that QUU has committed to a range of improvements to its asset management practices.

5.5 Bulk water

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

The QCA has also reviewed QUU's bulk water demand (Chapter 3) and made a corresponding minor reduction to 2013-14 and 2014-15 bulk water costs (Table 47). The bulk water costs are then passed-through into the MAR.

Table 47 Bulk water costs

	2013-14	*2014-15*
QUU bulk water cost ($m)	309.28	352.32
QUU bulk water demand (ML)	134,065	138,134
QCA bulk water demand (ML)	132,751	134,515
Weighted average bulk water price ($/kl)	2.307	2.551
QCA revised bulk water cost ($m)	306.29	343.11
Variance ($m)	-2.99	-9.21
Variance (%)	-1.0%	-2.6%

Source: QUU (2013e), DEWS (2013a).

5.6 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 95% of QUU's non-bulk operating costs in 2013-15 (Table 48).

Table 48 QUU non-bulk operating costs sampled for review ($m)

Cost	*2012-13*	*2013-14*	*2014-15*
Materials & services	98.31	105.40	106.66
Employees & contractors	77.58	76.03	76.93
Corporate costs	53.99	54.53	58.66
Electricity	11.51	12.93	14.49
Total sample	241.40	248.90	256.75
Total non-bulk operating costs	271.19	263.24	270.60

Source: QUU (2013e).

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

(a) prudent - required to meet QUU's legal and regulatory obligations or its contracts with customers and

(b) efficient - undertaken in a least-cost manner over the life of the relevant assets and is consistent with relevant benchmarks.

5.6.1 Materials and services

Materials and services costs include contractors used by QUU for maintenance work and materials used by internal and external staff for maintenance purposes. QUU forecast a 7.5% increase in materials and services in 2013-14, followed by a 1.2% increase in 2014-15.

QUU has increased the proportion of maintenance that is conducted on a planned, rather than responsive basis. This ratio has increased from 33:67 in 2010-11 to 48:52 in 2012-13. QUU is targeting an industry best practice ratio of 70:30.

SKM endorsed QUU's approach as being in line with good industry practice. However, SKM was concerned about the lack of forecast benefits from the change in maintenance philosophy to support any further expenditure, particularly through additional contractor/sub-contractor expenses.

SKM noted that the $3.9 million increase in contractor expenses consisted of $400,000 in condition monitoring and $3.5 million in planned maintenance. SKM was not satisfied that the increase in planned maintenance had been properly considered by QUU and noted that the previous review conducted for the QCA (Halcrow 2013) recommended savings to planned maintenance contractors. SKM therefore recommended that only $400,000 of the $3.9 million budgeted increase was efficient, a saving of $3.5 million. Using QUU's materials and services cost escalation factor of 2.5%, SKM estimated a corresponding 2014-15 saving of $3.6 million (Table 49).

Table 49 Revised QUU materials and services costs ($m)

	2012-13	***2013-14***	***2014-15***
Water	49.18	53.37	55.34
Sewerage	49.13	48.53	47.73
QCA Total	**98.31**	**101.90**	**103.07**
QUU Proposed Total	**98.31**	**105.40**	**106.66**
Variance	**-**	**-3.50**	**-3.59**

Source: SKM (2013b).

5.6.2 Employee and contractor costs

QUU (2013e) has budgeted for employee and contractor expenses of $76.0m in 2013-14, rising to $76.9 million in 2014-15.

Full-time equivalent positions

QUU has budgeted for a 4.2% reduction in full time equivalents (FTEs) in 2013-14, 55 FTE positions lower than the 2012-13 budget. QUU noted that this reduction was due to:

(a) a targeted 3% reduction in operating costs, corresponding to a decline of 50 FTE positions

(b) a further 1% productivity gain

(c) the conclusion of the ICT Separation program which engaged 39 FTEs and

(d) an offsetting increase of 34 FTEs due to the acquisition of a laboratory services provider.

If the increase in non-regulated laboratory positions is excluded, QUU is proposing a budgeted 6.7% or 87 FTE reduction in regulated services in 2013-14 (Table 50).

Table 50 QUU regulated FTEs budget

	2012-13	*2013-14*
Operations	896.8	864.7
Customer & Community	150.0	150.0
Corporate	247.5	241.3
ICT Separation	39.0	0.0
Total Regulated FTEs	**1333.3**	**1256.0**
Vacancy rate	-3.5%	-3.5%
Productivity gain		-1.0%
Budgeted Regulated FTEs	**1286.7**	**1199.5**

Note: Excludes unregulated laboratory FTEs. Source: QUU (2013f).

Due to efficiencies, QUU is expecting further FTE reductions in 2014-15 but has not developed a FTE budget for 2014-15 (QUU 2013f).

SKM noted that the decline in FTEs, including a 32.1 FTE decline in Operations, is consistent with more use being made of external resources to undertake maintenance work (see materials and services above).

In light of the reduction in regulated FTEs and other analysis, SKM did not recommend any further reduction to budgeted FTEs. The QCA accepts SKM's recommendation.

Employee cost escalation

QUU (2013d) submitted a cost escalation factor of 3.0% per annum for labour costs in 2013-15, based on internal analysis of industry trends. The QCA notes that this increase is lower than long term averages of the wage price index (Table 51) as well as 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 51 Wage price index

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

Source: ABS (2013).

While QUU's Enterprise Bargaining Agreement ('EBA2') is being negotiated, SKM noted that the 3.0% increase is consistent with that included in other Enterprise Bargaining Agreements either in place or under negotiation.

The QCA accepts SKM's assessment.

Overtime

SKM noted that 7.2% of QUU's employee expenses relate to overtime, with 92% of overtime expenses incurred in the Operations area. An internal cost review conducted for QUU (Third Horizon 2011) identified overtime as an area of potential cost savings. SKM noted that QUU has implemented changes in its roster as recommended by Third Horizon to reduce the level of Operations overtime.

To this end, SKM noted that the majority of Operations overtime relates to reactive maintenance and that QUU is using more external resources to undertake maintenance work. SKM noted that QUU is also increasing the ratio of planned to unplanned maintenance.

SKM recommended a general benchmark for efficient maintenance overtime of 5% or lower based on its industry knowledge and experience. Relative to QUU's budgeted Operations overtime of 7.2%, this represents a $1.55 million reduction to 2013-14 employee costs. Using QUU's employee cost escalation factor of 3.0%, SKM estimated a corresponding 2014-15 saving of $1.60 million (Table 52). The QCA accepts SKM's estimated savings.

Table 52 Recommended employee and contractor expenses ($m)

	2012-13	***2013-14***	***2014-15***
Water	32.53	30.80	31.02
Sewerage	45.05	43.68	44.31
QCA Total	**77.58**	**74.48**	**75.33**
QUU Submitted	**77.58**	**76.03**	**76.93**
Variance	**0**	**-1.55**	**-1.60**

Source: SKM (2013b), QCA calculations, QUU (2013e).

5.6.3 Corporate costs

Corporate costs are general corporate expenditures that cannot be readily allocated to other cost types. QUU has budgeted $54.5 million in corporate costs for 2013-14 (Table 53). This is forecast to increase by 7.7% to $58.7 million in 2014-15.

Table 53 QUU 2013-14 corporate costs ($'000)

	Employee	*Contractors*	*Licence & Regulatory*	*Materials & Services*	*Total*
Office of CEO	3,313	3,239	-	7,233	13,785
People & Safety	4,737	-	-	3,004	7,741
Finance, Risk & Procurement	8,709	119	694	2,905	12,427
Information Services	4,844	-	-	9,578	14,422
Strategy & Growth	604	-	-	363	967
Operations	2,713	-	-	2,478	5,191
Total	**24,920**	**3,358**	**694**	**25,561**	**54,533**

Source: QUU (2013e).

Corporate employee costs

QUU's average cost per corporate employee in 2012-13 is expected to be $100,180. QUU has forecast this to increase by 6.8% in 2013-14 and decrease by 1.7% in 2014-15.

SKM found that the average cost for corporate employees is reasonable as it includes salary and salary-on-costs such as superannuation, payroll tax, workers' compensation, leave provisions and overtime. However, SKM found the forecast increase of 6.8% for 2013-14 to be excessive. SKM therefore recommended that the increase should be more closely aligned with the expected increase in unit labour costs. This would result in an increase of 3% in 2013-14, as opposed to QUU's forecast increase of 6.8%.

The QCA accepts SKM's recommendation and has applied an escalation rate of 3% to QUU's 2013-14 average corporate employee costs (Table 54).

Table 54 QUU's corporate employee costs

	2012-13	*2013-14*	*2014-15*
QUU submitted cost per corporate employee	$100,180	$107,003	$105,165
QCA recommended cost per corporate employee	$100,180	$103,185	$101,431
Savings per employee	-	$3,818	$3,734
Number of employees	243.9	232.9	232.9*
Total savings	**-**	**$889,212**	**$869,649**

*Note: *SKM assumed no change in FTEs in 2014-15. Source: SKM (2013b).*

Furthermore, SKM noted that 4.5% of QUU employees are in the people and safety division. Drawing on Deloitte's (2011) review of Sunwater costs, SKM has concluded that an appropriate ratio for QUU would be 4%. This would result in a reduction of 8.5 FTEs in 2013-14, a saving of

$877,000. SKM did not recommend any corresponding savings in 2014-15, noting that QUU has already budgeted for a reduction in corporate employee costs in 2014-15 equivalent to 11 FTEs.

The QCA accepts SKM's findings.

Corporate non-labour costs

QUU has forecast non-labour corporate costs of $29.6 million in 2013-14 and $33.3 million in 2014-15. QUU has indicated that the increase in its corporate costs can be explained, in part, by a 2.5% increase in non-labour costs and a net increase in new initiatives and temporary projects.

SKM's reconciliation of QUU's non-labour corporate costs found them to be efficient in 2013-14 but that $854,000 in 2014-15 cannot be accounted for.

The QCA accepts SKM's finding and proposes to remove $854,000 from recommended corporate costs for 2014-15.

QUU has subsequently advised the QCA that it inadvertently over-allocated corporate costs by $130,000 in 2013-14 and under-allocated electricity costs by the same amount. The QCA has therefore removed $130,000 from corporate costs for 2013-14. This has been added to electricity costs for 2013-14 as discussed in section 5.5.4.

Conclusion

The QCA considers that there is scope for QUU to make savings in its corporate costs (Table 55).

Table 55 Adjustments to QUU's corporate costs ($)

Adjustment	*2013-14*	*2014-15*
Corporate employee cost escalation at 3% (not 6.8%)	-889,212	-869,649
Reduction of 8.5 people and safety FTEs	-877,000	-
Unaccounted for non-labour costs	-	-854,000
Over allocation of corporate costs	-130,000	-145,730
Total adjustments	**-1,896,212**	**-1,869,379**

Source: SKM (2013b).

5.6.4 Electricity

QUU 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

When QUU prepared its budget estimates in October 2012, it did not yet have data on electricity usage for 2012-13. QUU therefore used 2011-12 data as the basis for projecting usage in 2013-14. QUU has forecast growth in energy use of 2.9% (for both water and sewerage services and across its service area) between 2011-12 and 2013-14 based on its forecast growth in bulk water and sewerage flows over this period. QUU has budgeted for offsetting electricity efficiency savings of 2.5% of in 2013-14 in line with recommendations made by Third Horizon (2012).

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 QUU's energy use. This equates to growth between 2011-12 and 2013-14 of 4.01% in Brisbane and 7.44% in Ipswich, Somerset, Lockyer Valley and Scenic Rim. The QCA has also maintained QUU's 2.5% efficiency saving. The QCA's changes increase QUU's forecast electricity costs by $150,000 in 2013-14.

Energy prices

QUU's electricity price on large sites is made up of usage and network charges. QUU has forecast price increases using the terms of its current electricity contract until it expires in 31 December 2013. QUU forecast an annual increase, for this six-month period, of 11.6% for usage charges. For the second half of 2013-14, QUU forecast an increase of 2.3% for usage charges, based on an SKM report for WSAA. For network charges, QUU has forecast an increase of 7.5% for all of 2013-14 based on an estimate by Energetics (2012).

The QCA accepts QUU's proposed price increases for its large sites to be efficient as they are based on contractual provisions arising from competitive tender.

For QUU's small sites, the contract rate amounts to a discount of 19% off the regulated retail tariff. QUU has derived the 2013-14 electricity budget by escalating its 2011-12 electricity costs by estimated price increases of 7.8% in 2012-13 and 2.3% in 2013-14.

As in the previous review, the QCA considers that the appropriate price increase to apply to small sites is that in the QCA's electricity retail tariff determinations (QCA 2012b and 2013b), adjusted for the 19% discount that QUU receives. This equates to a price reduction of 8.61% for 2012-13 and a price increase of 15.43% for 2013-14, which 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). Applying these price changes reduce QUU's forecast electricity costs by $160,000 in 2013-14.

In addition to its price escalation factors, QUU has forecast a carbon price of 2.265 c/kWh for 2013-14. The QCA has revised this to 2.169 c/kWh consistent with its retail electricity tariff determination for 2013-14. This reduces QUU's electricity costs by $90,000.

These adjustments represent a net reduction of $100,000 in electricity costs in 2013-14. QUU has subsequently advised that it inadvertently allocated some electricity costs to corporate overheads in 2013-14, such that its submitted electricity costs of $12.93 million in 2013-14 is under-allocated by $130,000. The QCA has therefore added an extra $130,000 to QUU's submitted electricity costs for 2013-14.

The net effect of these adjustments is a slight increase in QUU's proposed budget for 2013-14 as shown in Table 56.

Table 56 Revised QUU electricity costs ($m)

	2012-13	*2013-14*	*2014-15*
Water	1.63	1.59	1.78
Sewerage	9.83	11.37	12.75
QCA Total	**11.46**	**12.96**	**14.52**
QUU Proposed Total	**11.51**	**12.93**	**14.49**
Variance	**-0.05**	**0.03**	**0.03**

Source: QCA calculations.

QCA has escalated the 2013-14 electricity costs by 12.1% to obtain 2014-15 estimates. This reflects a cost escalation rate of 10.3% and a usage escalation rate of 1.75% as proposed by QUU (2013d).

5.6.5 Tax

QUU submitted a tax cost of $8.9 million in 2013-14. The QCA's tax estimate is calculated to be consistent with its estimate of the MAR (chapter 7).

Table 57 Tax ($m)

	2013-14	*2014-15*
QUU Submitted	8.90	9.72
QCA Recommended	9.61	10.49
Variance	0.71	0.77

Source: QCA calculations.

5.7 Operating costs summary

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

(a) lower bulk water demand (-$12.2 million)

(b) a reduction in the planned maintenance contractor expenses component of materials and services (-$7.1 million)

(c) reduced employee expenses incurred due to operations overtime (-$3.2 million)

(d) a reduced number and average cost of corporate employees (-$2.6 million)

(e) removal of unaccounted for corporate expenditure (-$1.1 million)

(f) revisions to QUU's usage and price forecasts of electricity (+$0.1 million) and

(g) a revised tax estimate (+$1.5 million)

Overall, this is a reduction of $24.7 million or 2% of QUU's operating costs. Excluding the revision to bulk water costs (-$12.2 million), it is a $12.5 million or 2.3% reduction to non-bulk operating costs.

Table 58 Revised operating costs 2013-15 ($m)

	2013-14	***2014-15***
Bulk water	306.29	343.11
Materials & services	101.90	103.07
Employees & contractors	74.48	75.33
Corporate costs	52.64	56.79
Electricity	12.96	14.54
Non recurrent costs	1.02	-
Tax	9.61	10.49
Other	13.32	13.85
Total operating costs	**572.21**	**617.17**
QUU proposed total	**581.41**	**632.63**
Variance	**-9.20**	**-15.46**

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

6 MAXIMUM ALLOWABLE REVENUES

6.1 Scope of review

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

(a) operating and maintenance costs

(b) capital costs (including return on capital and depreciation)

(c) tax payable.

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

6.2 Elements underpinning total costs

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

(a) the asset offset approach to the treatment of capital contributions from 1 July 2013

(b) the new benchmark WACC of 6.57%, noting its concerns would be raised during the QCA's broader WACC review

(c) capitalisation of past under-recovery due to the price cap and the 2011 flood.

As noted in chapter 4, the QCA accepts QUU's change to an asset offset approach to the treatment of capital contributions, as this is allowed under the Direction and is the QCA's preferred treatment. Further, the QCA must adopt the benchmark WACC of 6.57%. The QCA has not capitalised the past under-recovery due to the price cap, as this would undermine the intention of the relevant legislation. The QCA has excluded past under-recovery due to the 2011 flood until insurance claims are finalised and prudency and efficiency is demonstrated.

6.3 Costs for 2013-15

The key components of QUU's costs for its water and sewerage activities are set out in Table 59 and Table 60 below.

Table 59 QUU Costs - Water ($m)

	2012-13	***2013-14***	***2014-15***
Bulk water	269.8	309.3	352.3
Other operating costs	112.5	116.8	120.9
Return on capital	76.2	78.3	80.3
Return of capital	56.8	60.5	65.1
Total Costs	**515.3**	**564.8**	**618.7**

Note: Reflects forecast costs underpinning prices. Source: QUU (2013d and 2012b).

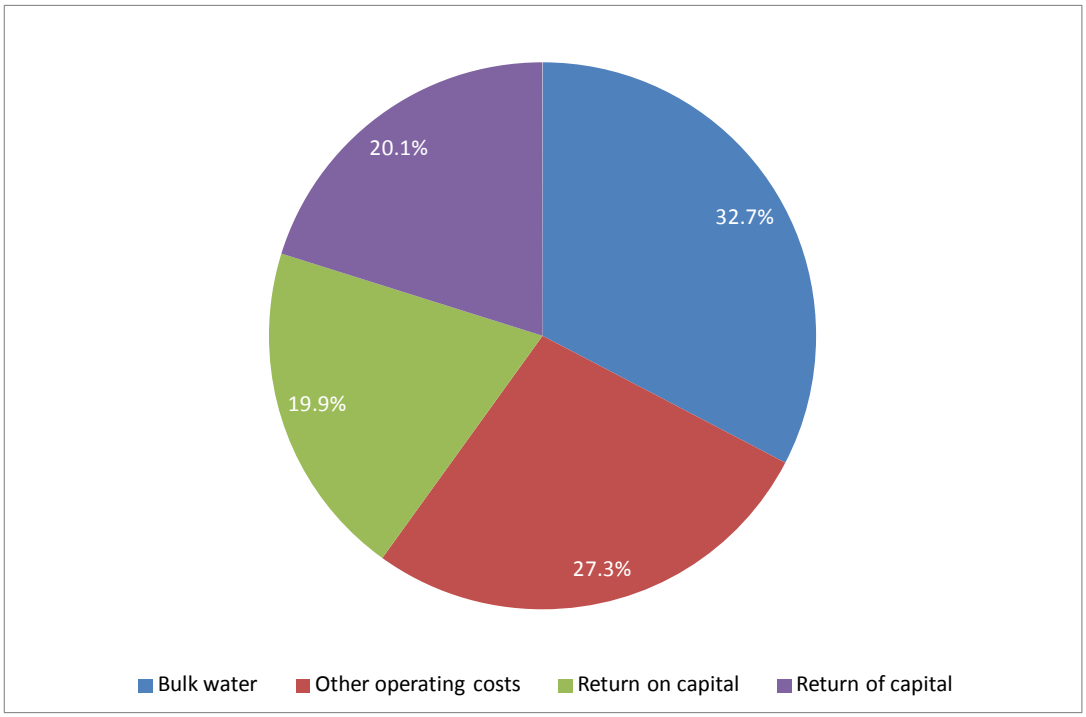
Table 60 QUU Costs - Sewerage ($m)

	2012-13	*2013-14*	*2014-15*
Other operating costs	158.8	155.4	159.4
Return on capital	107.4	119.8	125.2
Return of capital	123.0	135.9	146.5
Total Costs	**389.1**	**411.1**	**431.0**

Source: QUU (2013d and 2012b).

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

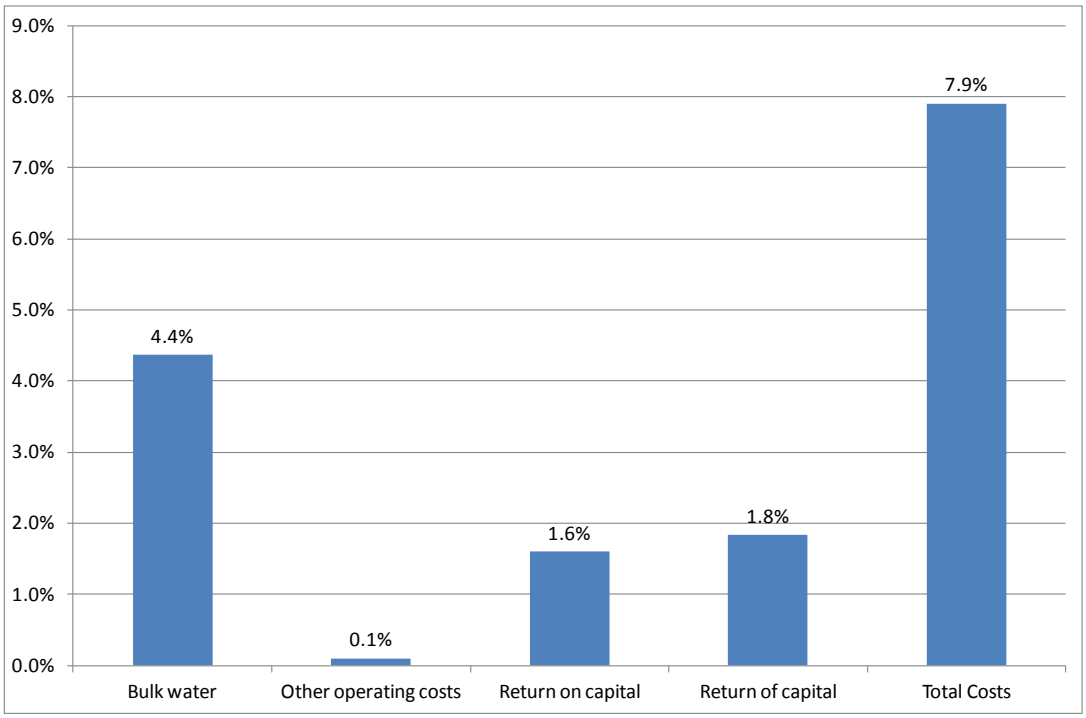
Figure 9 QUU total costs for 2013-15



Source: QUU (2013d).

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

Figure 10 Contribution to change in QUU's total costs in 2013-14



Note: Reflects contribution to change in forecast costs. Source: QUU (2013d).

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, the benchmark WACC of 6.57% and capitalisation of past under-recovery due to the 2011 flood.

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

The differences between QUU'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 (-$12.2 million)

(b) net reductions to retail-distribution operating costs (-$12.4 million) arising from:

  (i) a reduction in the planned maintenance contractor expenses component of materials and services (-$7.1 million)

  (ii) reduced employee expenses incurred due to operations overtime (-$3.2 million)

  (iii) a reduced number and average cost of corporate employees (-$2.6 million)

  (iv) removal of unaccounted for corporate expenditure (-$1.1 million)

  (v) revisions to QUU's usage and price forecasts of electricity (+$0.1 million) and

  (vi) a revised tax estimate (+$1.5 million)

(c) a lower estimate of return on capital due to capital expenditure savings (-$4.2 million)

(d) a lower estimate of return of capital, due to a lower asset base and reduced capital expenditure forecast (-$15.4 million).

Table 61 QCA MAR - Water

	2012-13	*2013-14*	*2014-15*
Bulk water	270.33	306.29	343.11
Other operating costs	106.87	113.62	117.71
Return on capital	76.14*	77.96	79.13
Return of capital	55.68	58.33	61.61
Total Costs	**509.02**	**556.20**	**601.56**

*Note: * 2012-13 capital contributions are offset against return on capital under the revenue offset approach adopted by QUU in 2012-13. Source: QCA (2012, 2013a and calculations).*

Table 62 QCA MAR - Sewerage

	2012-13	*2013-14*	*2014-15*
Other operating costs	152.90	152.30	156.36
Return on capital	107.25*	118.90	123.44
Return of capital	121.72	132.40	140.31
Total Costs	**381.38**	**403.59**	**420.11**

*Note: * 2012-13 capital contributions are offset against return on capital under the revenue offset approach adopted by QUU in 2012-13. Source: QCA (2012, 2013a and calculations).*

7 COMPARING REVENUES WITH MAR

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 QUU Submission

QUU 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, QUU submitted:

(a) water revenue of $506 million is below its total costs of $565 million

(b) sewerage revenue of $388 million is below its total costs of $411 million

(c) as a whole, revenues of $895 million are below total costs of $976 million.

For 2014-15, QUU submitted:

(a) water revenue of $560 million is below its total costs of $619 million

(b) sewerage revenue of $411 million is below its total costs of $431 million

(c) as a whole, revenues of $971 million are below total costs of $1,050 million.

7.2 QCA Analysis

Caveat on 2014-15 findings

As noted previously, QUU'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, QUU has not yet set its prices for 2014-15. As QUU is anticipating some tariff reforms in 2014-15, there is a possibility that the 2014-15 revenue forecasts provided for this review will differ from those that match QUU's actual 2014-15 prices.

Under the Direction, the QCA's analysis is based on the 2013-15 revenues forecasts provided for this review. There is no ability under the current Direction to investigate and report on whether subsequent revenue forecasts have materially changed from the previous forecasts, and to update the findings accordingly. Should there be real concerns when QUU 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 QUU revenues and QCA MAR

A comparison of QUU'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 QUU for 2013-14:

(a) water revenue of $506 million is 8.9% below the QCA MAR of $556 million

(b) sewerage revenue of $388 million is 3.8% below the QCA MAR of $404 million

(c) as a whole, revenues of $895 million are 6.8% below the QCA MAR of $960 million.

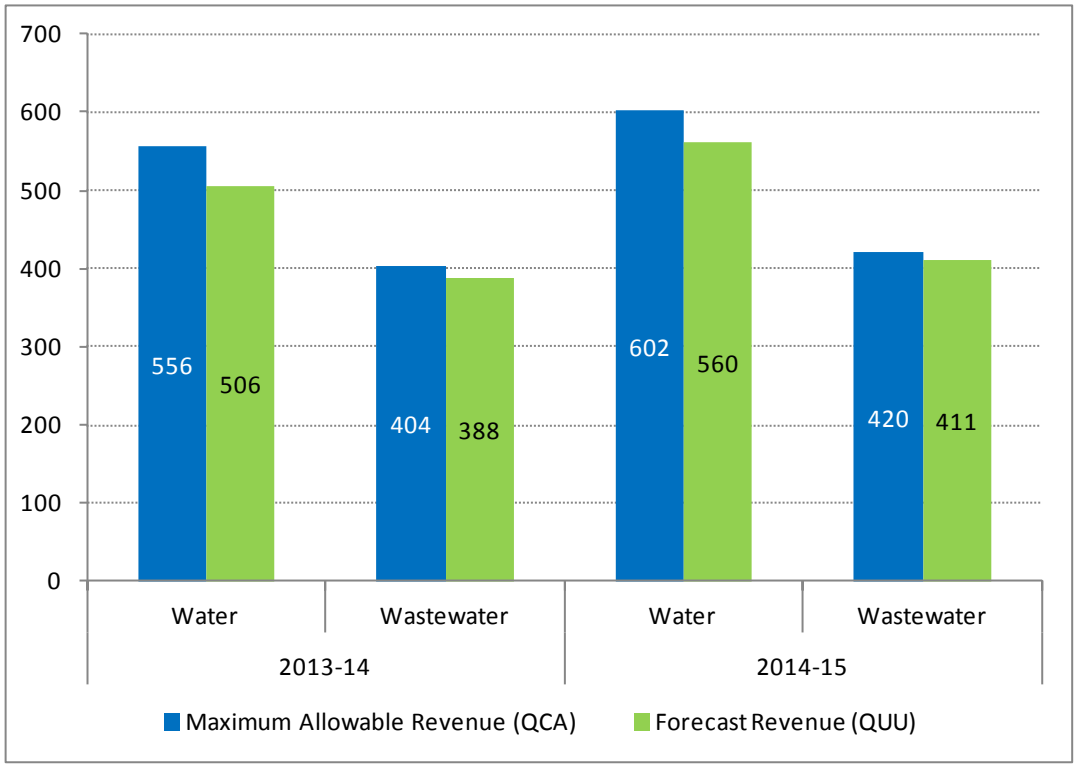
For QUU for 2014-15:

(a) water revenue of $560 million is 6.9% below the QCA MAR of $602 million

(b) sewerage revenue of $411 million is 2.1% below the QCA MAR of $420 million

(c) as a whole, revenues of $971 million are 4.9% below the QCA MAR of $1,022 million.

Figure 11 MAR vs revenue ($m)



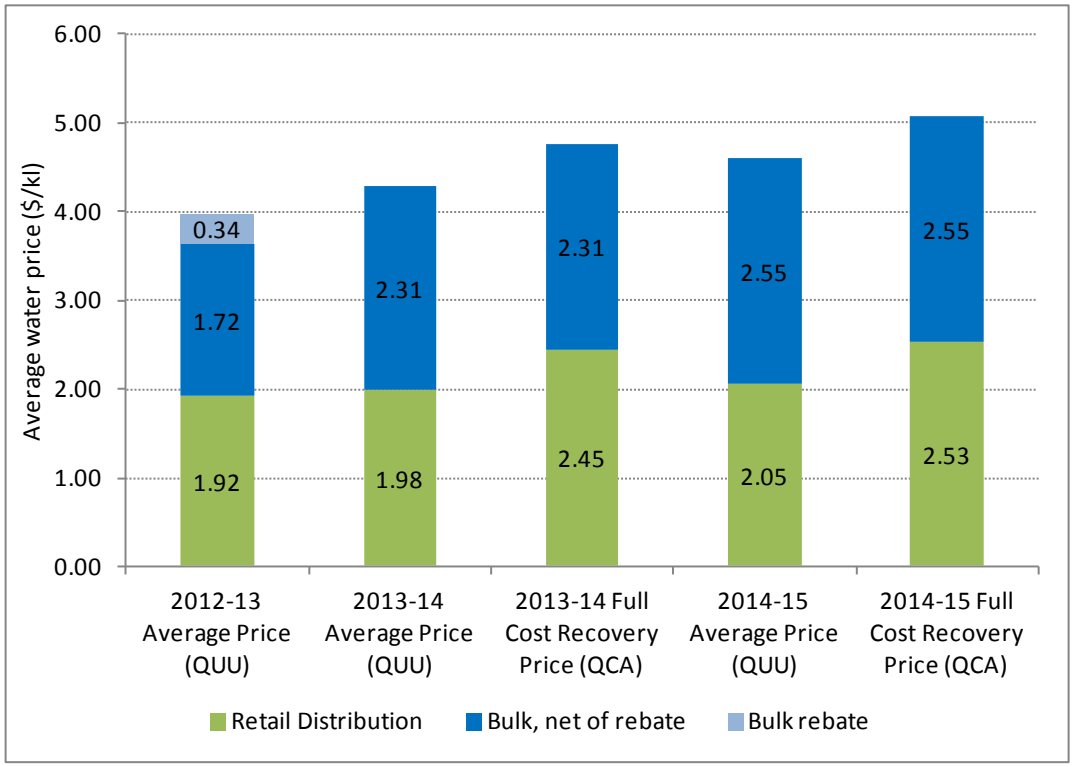
Source: QUU (2013e), QCA calculations.

Comparison of average prices

As in previous years, the QCA has also compared QUU'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.

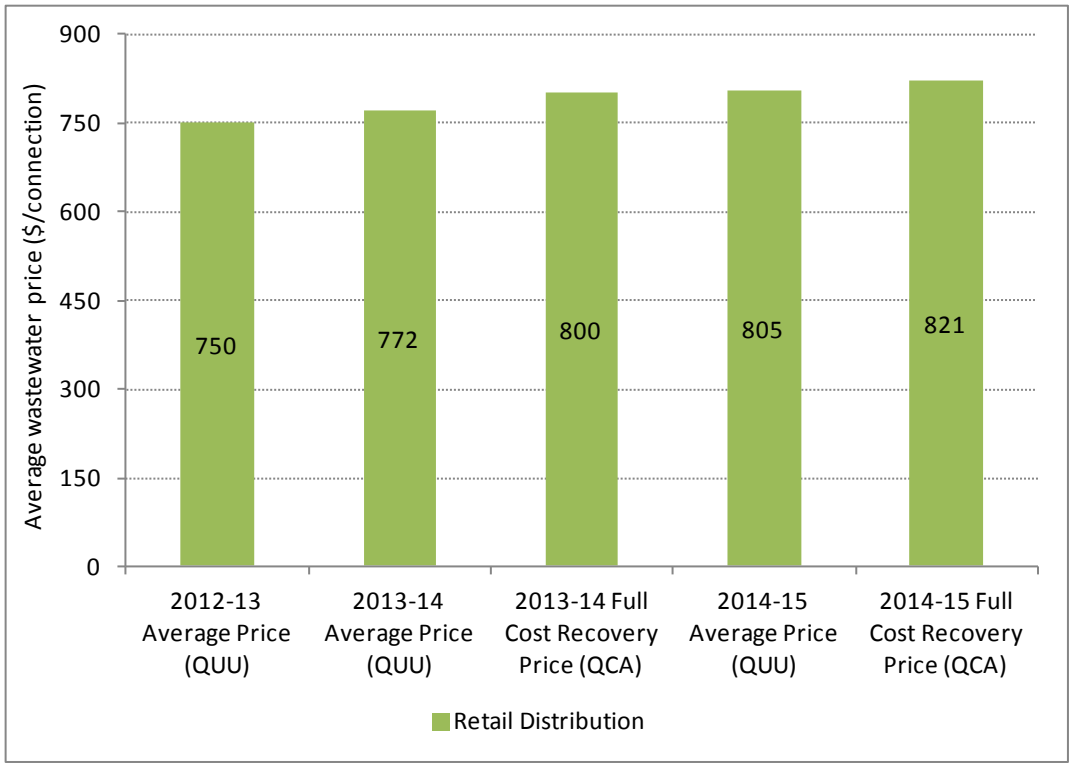
QUU's average annual prices are slightly below the prices which would fully recover costs for 2013-14 and 2014-15 (as shown in Figure 12 and Figure 13 below). As stated in previous reports, prices should ideally be set and smoothed over a longer period to avoid large annual variations.

Figure 12 Average water prices



Source: QUU (2013e), QCA calculations.

Figure 13 Average sewerage prices



Source: QUU (2013e), QCA calculations.

Comparison using consistent demand

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

Table 63 Further comparison of revenues and QCA MAR ($m)

	2013-14	***2014-15***
QCA MAR	959.79	1,021.66
QCA Expected Revenues	890.14	959.29
Difference	-69.65	-62.37

Source: QUU (2013e).

QCA Finding

As QUU'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 64 and Table 65 below.

Table 64 Costs and revenues 2013-15 ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	QUU	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*
Bulk water	309.3	306.3	-	-	352.3	343.1	-	-
Other opex	116.8	113.6	155.4	152.3	120.9	117.7	159.4	156.4
Return on capital	78.3	78.0	119.8	118.9	80.3	79.1	125.2	123.4
Return of capital	60.5	58.3	135.9	132.4	65.1	61.6	146.5	140.3
Total Costs (MAR)	**564.9**	**556.2**	**411.1**	**403.6**	**618.6**	**601.6**	**431.1**	**420.1**
Total Revenues	506.4	506.4	388.1	388.1	560.4	560.4	411.2	411.2
Over/(Under) recovery	**(58.5)**	**(49.8)**	**(23.0)**	**(15.5)**	**(58.3)**	**(41.2)**	**(20.0)**	**(8.9)**

Source: QUU (2013e), QCA calculations.

Table 65 Average Prices

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	QUU	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*	*QUU*	*QCA*
Total Revenues/MAR ($m)	506.4	556.2	388.1	403.6	560.4	601.6	411.2	420.1
Volume ('000 ML or '000 connections)	118.1	116.9	502.7	504.3	121.7	118.5	510.6	511.6
Average Price ($/kl or $/connection)	**4.29**	**4.76**	**772.14**	**800.41**	**4.60**	**5.08**	**805.21**	**821.22**

Source: QUU (2013e), QCA calculations.

9 KEY FINDINGS FOR 2013-15

In 2013-14, the retail and distribution component of prices for residential and non-residential customers increased by 3.9%. QUU has not announced its prices for 2014-15, and its revenue forecast for 2014-15 reflects a broad organisational target.

Bulk water costs account for 32.7% of QUU's total costs of supplying water and sewerage activities in 2013-15. Retail and distribution costs account for the remainder with operating costs comprising 27.3% and capital costs 40.0%

QUU's revenues lie below the QCA's MAR in both years (Figure 14). For QUU for 2013-14:

(a) water revenue of $506 million is 8.9% below the QCA MAR of $556 million

(b) sewerage revenue of $388 million is 3.8% below the QCA MAR of $404 million

(c) as a whole, revenues of $895 million are 6.8% below the QCA MAR of $960 million.

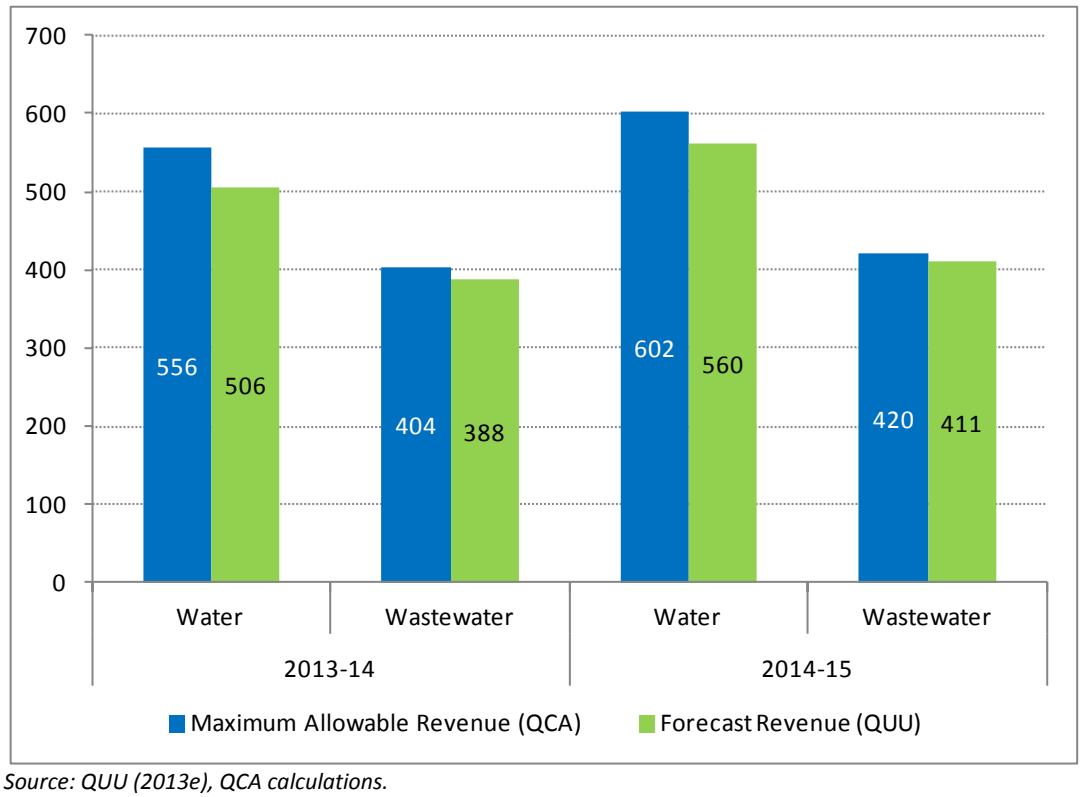
For QUU for 2014-15:

(a) water revenue of $560 million is 6.9% below the QCA MAR of $602 million

(b) sewerage revenue of $411 million is 2.1% below the QCA MAR of $420 million

(c) as a whole, revenues of $971 million are 4.9% below the QCA MAR of $1,022 million.

Figure 14 MAR and revenue ($m)



Source: QUU (2013e), 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 QUU'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.

APPENDIX A: MINISTERIAL DIRECTION

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:

RABt-1 = the rolled forward RAB for 1 July 2012 as verified by the QCA;

iii. for Logan, Redland and Gold Coast City Councils:
RABt-1 = 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 prudency 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.

[redacted]

TIM NICHOLLS
Treasurer and Minister for Trade

[redacted]

JARROD BLEIJIE
Attorney-General and
Minister for Justice

APPENDIX B: QUU SELECTED PRICES[48]

Service	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Residential Properties - Brisbane					
Water Services					
Water access charge (per property)		$167.16	$173.64	pa.	3.9%
Water access charge - vacant land		$167.16	$173.64	pa.	3.9%
Tier 1 Consumption	<=255kL	$0.666900	$0.692909	/kL	3.9%
Tier 2 Consumption	256-310kL	$0.707940	$0.735550	/kL	3.9%
Tier 3 Consumption	>310kL	$1.261980	$1.311197	/kL	3.9%
State Government Bulk Water Charge	per kL	$2.057000	$2.302000	/kL	11.9%
Sewerage Services					
Sewerage access charge		$475.92	$494.52	pa.	3.9%
Sewerage access charge - reduced		$177.12	$184.08	pa.	3.9%
Non-residential Properties - Brisbane	**Volume Charge Tier**	**2012/13**	**2013/14**	**Unit**	**% increase**
Water Services					
Water access charge (per property)		$169.32	$175.92	pa.	3.9%
Water access charge - vacant land		$169.32	$175.92	pa.	3.9%
Tier 1 Consumption	<=200kL	$0.800290	$0.831501	/kL	3.9%
Tier 2 Consumption	201-300kL	$0.914617	$0.950287	/kL	3.9%
Tier 3 Consumption	>300kL	$1.340746	$1.393035	/kL	3.9%
State Government Bulk Water Charge	per klL	$2.057000	$2.302000	/kL	11.9%
Sewerage Services					
Sewerage access charge		$482.16	$501.00	pa.	3.9%
Sewerage access charge - reduced		$179.40	$186.36	pa.	3.9%
Pedestal Charges					
General (other - not included in categories below)	2 - 8 pedestals (each)	$512.40	$532.44	pa.	3.9%
	9 -12 pedestals (each)	$641.64	$666.72	pa.	3.9%
	over 12 pedestals (each)	$789.00	$819.72	pa.	3.9%
Multi-residential properties (non-community title scheme)	2 - 8 pedestals (each)	$424.32	$440.88	pa.	3.9%
	9 -12 pedestals (each)	$532.32	$553.08	pa.	3.9%
	over 12 pedestals (each)	$655.68	$681.24	pa.	3.9%
Retirement village, Child care centre, Convalescent Homes, Hospitals, Schools, Kindergartens, Community Protection Centres, Churches, Welfare Homes (excluding land used	2 - 8 pedestals (each)	$200.04	$207.84	pa.	3.9%
	9 -12 pedestals (each)	$249.84	$259.56	pa.	3.9%
	over 12 pedestals (each)	$308.04	$320.04	pa.	3.9%
Major Sporting Stadiums owned by the Major Sports	edestal/s (each)	$512.40	$532.44	pa.	3.9%
Trade Waste					
Trade waste application fee		$156.50			
Category A - Minimum charge		$360.00			
Category B		$1.34			
Category C		$1.02			
Category D					
Volume		$0.89			
Biological oxygen demand (standard rate)		$0.87			
Biological oxygen demand (discount rate)		$0.66			
Suspended solids		$0.79			
Nitrogen		$1.98			
Phosphorus		$1.57			
Trade waste application fee		$156.50	$160.40	pa.	2.5%
Category A - Minimum charge		$360.00	$369.00	pa.	2.5%
Category B		$1.34	$1.41	/kL	5.2%
Category C		$1.02	$1.07	/kL	4.9%
Category E		$1.34	$1.41	/kL	5.2%
Category D					
Volume		$0.89	$0.91	/kL	2.2%
Biological oxygen demand (standard rate)		$0.87	$0.89	/kg	2.3%
Biological oxygen demand (discount rate)		$0.66	$0.68	/kg	3.0%
Suspended solids		$0.79	$0.81	/kg	2.5%
Nitrogen		$1.98	$2.03	/kg	2.5%
Phosphorus		$1.57	$1.61	/kg	2.5%

[48] Residential and non-residential charges, including trade waste and recycled water. QUU's sundry charges are shown in Appendix C.

Residential Properties - Ipswich	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Water access charge per connection		$280.00	$290.88	pa.	3.9%
Water access charge - connected but not metered		$1,008.48	$1,047.84	pa.	3.9%
Water access charge vacant land - not connected		$280.00	$290.88	pa.	3.9%
Water access charge vacant land - connected but		$1,008.48	$1,047.84	pa.	3.9%
Tier 1 Consumption		$0.810540	$0.842151	/kL	3.9%
Tier 2 Consumption		$1.292760	$1.343178	/kL	3.9%
Tier 3 Consumption		$1.641600	$1.705622	/kL	3.9%
State Government Bulk Water Charge		$1.993000	$2.238000	/kL	12.3%
Fire service connection all sizes		$447.00	$464.40	pa.	3.9%
Sewerage Services					
Sewerage access charge		$550.00	$571.44	pa.	3.9%

Non-residential Properties - Ipswich	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Water access charge based on connection size: (per connection)					
25mm or less		$343.80	$357.24	pa.	3.9%
26-32mm		$731.04	$759.60	pa.	3.9%
33-40mm		$1,162.08	$1,207.44	pa.	3.9%
41-50mm		$1,713.12	$1,779.96	pa.	3.9%
51-80mm		$4,337.52	$4,506.72	pa.	3.9%
81-100mm		$7,305.60	$7,590.48	pa.	3.9%
101-150mm		$17,464.80	$18,145.92	pa.	3.9%
151-250mm		$29,107.92	$30,243.12	pa.	3.9%
Greater than 250mm		$34,929.48	$36,291.72	pa.	3.9%
Water access charge vacant land (unconnected)		$337.20	$350.40	pa.	3.9%
Fire service connection all sizes		$452.76	$470.40	pa.	3.9%
Tier 1 Consumption	Tier 1 <=320kl	$0.821077	$0.853099	/kL	3.9%
Tier 2 Consumption	Tier 2 >320kl	$1.662941	$1.727796	/kL	3.9%
State Government Bulk Water Charge		$1.993000	$2.238000	/kL	12.3%
Sewerage Services					
Sewerage pedestal charge	Per pedestal	$575.40	$597.84	pa.	3.9%
Sewerage access charge vacant land		$575.40	$597.84	pa.	3.9%
Trade Waste					
Trade waste application fee		$156.50			
Category 1 (discharge less than 500kL per annum)					
Permit fee		$340.68			
Category 2 (discharge greater than 500kL per annum)					
Permit fee		$467.76			
Volume charge on total discharge		$1.38			
Category 3 (discharge greater than 500kL per annum plus high strength waste)					
Approval fee		$762.36			
Chemical Oxygen Demand	600 mg/l	$1.12			
Volume charge on total discharge	High strength thresholds	$1.38			
Suspended Solids	300 mg/l	$1.33			
Sulphate	500 mg/l	$1.73			
Nitrogen	60 mg/l	$2.44			
Phosphorus	15 mg/l	$7.50			
Trade waste application fee		$156.50	$160.40	pa.	2.5%
Category A - Minimum charge		$340.68	$357.72	pa.	5.0%
Category B		$1.38	$1.45	/kL	5.1%
Category C		$1.06	$1.09	/kL	2.8%
Category E		$1.38	$1.45	/kL	5.1%
Category D					
Volume		$1.37	$1.37	/kL	0.0%
Biological oxygen demand (standard rate)		$1.16	$1.16	/kg	0.0%
Biological oxygen demand (discount rate)		$0.88	$0.88	/kg	0.0%
Suspended solids		$1.62	$1.62	/kg	0.0%
Nitrogen		$1.82	$1.82	/kg	0.0%
Phosphorus		$4.05	$4.05	/kg	0.0%

Residential Properties - Lockyer Valley	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Tier 1 Consumption	Tier 1 <=300kL	$0.225720	$0.234523	/kL	3.9%
Tier 2 Consumption	Tier 2 >300kL	$1.087560	$1.129975	/kL	3.9%
State Government Bulk Water Charge		$2.250000	$2.495000	/kL	10.9%
Former Gatton Shire					
Water access charge - Full Pressure (per tenement)		$280.00	$290.88	pa.	3.9%
Water access charge - Constant Flow (per tenement)		$207.48	$215.52	pa.	3.9%
Vacant Land Water Access Charge					
Full Pressure Contiguous					
For the 1st 6 lots combined as one assessment		$186.72	$194.04	pa.	3.9%
For the 7th and each additional lot		$93.36	$96.96	pa.	3.9%
Full Pressure Non-Contiguous					
Lots with an area less than 2023 m^2 (per lot)		$186.72	$194.04	pa.	3.9%
Lots with an area of 2023 m^2 or more (per lot)		$279.96	$290.88	pa.	3.9%
Constant Flow Contiguous					
For the 1st 6 lots combined as one assessment		$131.40	$136.56	pa.	3.9%
For the 7th and each additional lot		$65.64	$68.16	pa.	3.8%
Constant Flow Non-Contiguous					
Lots with an area less than 2023 m^2 (per lot)		$131.40	$136.56	pa.	3.9%
Lots with an area of 2023 m^2 or more (per lot)		$207.48	$215.52	pa.	3.9%
Former Laidley Shire (excluding Forest Hill)					
Water access charge - Full Pressure (per tenement)		$280.00	$290.88	pa.	3.9%
Water access charge - Limited Flow (constant flow) (per tenement)		$207.48	$215.52	pa.	3.9%
Vacant Land - Full Pressure (per tenement)		$280.00	$290.88	pa.	3.9%
Vacant Land - Limited Flow (constant flow) (per tenement)		$207.48	$215.52	pa.	3.9%
Forest Hill					
Water access charge - Full Pressure (per tenement)		$280.00	$290.88	pa.	3.9%
Water access charge vacant land (per tenement)		$280.00	$290.88	pa.	3.9%
Water access charge - Water Pipeline (per tenement)		$315.00	$327.24	pa.	3.9%
Sewerage Services					
Sewerage access charge (per assessment)		$420.84	$437.28	pa.	3.9%
Sewerage access charge - Vacant land (per lot)		$231.00	$240.00	pa.	3.9%
Pressure Sewer Main (per assessment)		$318.12	$330.48	pa.	3.9%
Sewerage additional pedestal (per pedestal)		$318.12	$330.48	pa.	3.9%
Septic sewer - special arrangement		$82.16	$85.32	pa.	3.8%
Preston					
For the twelve months ending 30 June 2014, the charges for water to be made and levied on properties in the Preston area which are connected or intending to connect to the water main provided by Toowoomba Regional Council, be the charges as determined and advised by Toowoomba Regional Council.					

Non-residential Properties - Lockyer Valley	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Tier 1 Consumption	Tier 1 <=300kL	$0.446915	$0.464345	/kL	3.9%
Tier 2 Consumption	Tier 2 >300kL	$0.883437	$0.917891	/kL	3.9%
State Government Bulk Water Charge		$2.250000	$2.495000	/kL	10.9%
Former Gatton Shire (per tenement)					
Water access charge - Full Pressure					
1st tenement		$447.84	$465.36	pa.	3.9%
2nd to 6th tenements		$269.16	$279.60	pa.	3.9%
7th and each additional tenement		$224.04	$232.80	pa.	3.9%
Water access charge - Constant Flow					
1st tenement		$329.04	$341.88	pa.	3.9%
2nd to 6th tenements		$196.44	$204.12	pa.	3.9%
7th and each additional tenement		$165.00	$171.48	pa.	3.9%
Combined Residences/Businesses serviced by one meter					
Water access charge - Full Pressure		$447.84	$465.36	pa.	3.9%
Other Properties (Religious/Charitable/Non-Profit)					
Water access charge - Full Pressure		$240.60	$249.96	pa.	3.9%
Water access charge - Constant Flow		$171.84	$178.56	pa.	3.9%
Vacant Land Water Access Charge					
Water access charge - Full Pressure Contiguous					
For the 1st 6 lots combined as one assessment		$265.08	$275.40	pa.	3.9%
For the 7th and each additional lot		$132.60	$137.76	pa.	3.9%
Water access charge - Full Pressure Non-Contiguous					
Lots with an area less than 2023 m^2 (per lot)		$265.08	$275.40	pa.	3.9%
Lots with an area of 2023 m^2 or more (per lot)		$397.80	$413.28	pa.	3.9%
Water access charge - Constant Flow Contiguous					
For the 1st 6 lots combined as one assessment		$186.60	$193.92	pa.	3.9%
For the 7th and each additional lot		$93.24	$96.84	pa.	3.9%
Water access charge - Constant Flow Non-Contiguous					
Lots with an area less than 2023 m^2 (per lot)		$186.60	$193.92	pa.	3.9%
Lots with an area of 2023 m^2 or more (per lot)		$294.72	$306.24	pa.	3.9%
Former Laidley Shire (excluding Forest Hill) (per tenement)					
Water access charge - Full Pressure (standard)		$397.80	$413.28	pa.	3.9%
Water access charge - Full Pressure Other (Religious/Charitable/Non-profit)		$240.60	$249.96	pa.	3.9%
Water access full pressure charge vacant land		$397.80	$413.28	pa.	3.9%
Water access charge - Constant Flow (limited flow)		$294.72	$306.24	pa.	3.9%
Water access charge - Constant Flow Other (Religious/Charitable/Non-profit)		$171.84	$178.56	pa.	3.9%
Water access constant flow charge vacant land		$294.72	$306.24	pa.	3.9%
Water access charge - Water Pipeline		$397.80	$413.28	pa.	3.9%
Forest Hill (per tenement)					
Water access charge - Full Pressure		$353.64	$367.44	pa.	3.9%
Water access charge - Other (Religious/Charitable/Non-profit)		$255.36	$265.32	pa.	3.9%
Water access charge vacant land		$353.64	$367.44	pa.	3.9%
Stanbroke Beef Pty Ltd					
Special water access charge		$35,096.28	$36,465.00	pa.	3.9%
Sewerage Services					
Sewerage charge 1st pedestal		$426.36	$443.04	pa.	3.9%
Sewage additional pedestals (per pedestal)		$322.20	$334.80	pa.	3.9%
Sewerage access charge - Vacant land		$234.00	$243.12	pa.	3.9%
Pressure Sewer Main		$322.20	$334.80	pa.	3.9%
Sewerage charge 1st pedestal - Laidley Caravan Park		$426.36	$443.04	pa.	3.9%
Sewerage additional pedestal - Laidley Caravan Park (per pedestal)		$276.72	$287.52	pa.	3.9%
Preston					
For the twelve months ending 30 June 2014, the charges for water to be made and levied on properties in the Preston area which are connected or intending to connect to the water main provided by Toowoomba Regional Council, be the charges as determined and advised by Toowoomba Regional Council.					

Residential Properties - Scenic Rim	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Water access charge based on connection size (determined by a flow capacity factor, FCF)					
Connection Size	FCF				
20 mm	1	$280.00	$290.88	pa.	3.9%
25 mm	1.5625	$280.00	$290.88	pa.	3.9%
32 mm	2.56	$898.56	$933.60	pa.	3.9%
40 mm	4	$1,404.12	$1,458.84	pa.	3.9%
50 mm	6.25	$2,193.84	$2,279.40	pa.	3.9%
65 mm	12.0193	$4,218.96	$4,383.48	pa.	3.9%
80 mm	16	$5,616.24	$5,835.24	pa.	3.9%
100 mm	25	$8,775.36	$9,117.60	pa.	3.9%
150 mm	56.25	$19,744.56	$20,514.60	pa.	3.9%
200 mm	100	$35,101.56	$36,470.52	pa.	3.9%
Water access charge vacant land		$280.00	$290.88	pa.	3.9%
Water access charge - restricted demand		$280.00	$290.88	pa.	3.9%
Water Consumption		$0.831060	$0.863471	/kL	3.9%
State Government Bulk Water Charge		$2.358000	$2.602000	/kL	10.3%
Sewerage Services					
Sewerage access charge		$500.00	$519.48	pa.	3.9%
Sewerage access charge - vacant land (per lot)		$283.80	$294.84	pa.	3.9%

Non-residential Properties - Scenic Rim	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Water access charge based on connection size (determined by a flow capacity factor, FCF)					
Connection Size	FCF				
20 mm	1	$355.56	$369.48	pa.	3.9%
25 mm	1.5625	$555.60	$577.32	pa.	3.9%
32 mm	2.56	$910.20	$945.72	pa.	3.9%
40 mm	4	$1,422.36	$1,477.80	pa.	3.9%
50 mm	6.25	$2,222.40	$2,309.04	pa.	3.9%
65 mm	12.0193	$4,273.80	$4,440.48	pa.	3.9%
80 mm	16	$5,689.20	$5,911.08	pa.	3.9%
100 mm	25	$8,889.48	$9,236.16	pa.	3.9%
150 mm	56.25	$20,001.24	$20,781.24	pa.	3.9%
200 mm	100	$35,557.92	$36,944.64	pa.	3.9%
Water access charge vacant land		$355.56	$369.48	pa.	3.9%
Water access charge restricted demand		$355.56	$369.48	pa.	3.9%
Water Consumption		$0.841864	$0.874697	/kL	3.9%
State Government Bulk Water Charge		$2.358000	$2.602000	/kL	10.3%
Sewerage Services					
Sewerage access charge (1st pedestal)		$525.60	$546.12	pa.	3.9%
Sewerage additional pedestals (per pedestal)		$318.24	$330.60	pa.	3.9%
Sewerage access charge - Vacant land (per lot)		$287.52	$298.68	pa.	3.9%

Residential Properties - Somerset	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Annual water access charge (per connection)		$280.00	$290.88	pa.	3.9%
Bore water annual access charge (Moore and Coominya townships)		$280.00	$290.88	pa.	
					3.9%
Tier 1 Consumption - per connection	Tier 1 (<=300kL)	$0.235980	$0.245183	/kL	3.9%
Tier 2 Consumption - per connection	Tier 2 (>300kL)	$0.543780	$0.564987	/kL	3.9%
State Government Bulk Water Charge		$2.627000	$2.872000	/kL	9.3%
Sewerage Services					
Former Esk Shire					
Per single residence, flat, one pedestal premise		$500.00	$519.48	pa.	3.9%
Sewerage access charge - Vacant land (per lot)		$275.28	$285.96	pa.	3.9%
Kilcoy					
Per single residence, flat, one pedestal premise		$398.40	$413.88	pa.	3.9%
Sewerage access charge - Vacant land (per lot)		$351.84	$365.52	pa.	3.9%

Non-residential Properties - Somerset	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Water Services					
Annual water access charge (per connection)		$298.68	$310.32	pa.	3.9%
Tier 1 Consumption - per connection	Tier 1 (<=300kl)	$0.239048	$0.248371	/kL	3.9%
Tier 2 Consumption - per connection	Tier 2 (>300kl)	$0.550849	$0.572332	/kL	3.9%
State Government Bulk Water Charge		$2.627000	$2.872000	/kL	9.3%
Sewerage Services					
Former Kilcoy Shire					
Sewerage access charge (per pedestal) - Government Properties		$548.04	$569.40	pa.	3.9%
Sewerage access charge (per pedestal) - Other non-residential Properties		$403.56	$419.28	pa.	3.9%
Sewerage access charge - Vacant land (per lot)		$356.40	$370.32	pa.	3.9%
Former Esk Shire					
Sewerage access charge (1st pedestal)	Base Charge:	$557.76	$579.48	pa.	3.9%
Building used exclusively for public worship		68% of base charge	68% of base charge	pa.	
Hall on land attracting a General rate		50%	50%	pa.	0.0%
Hall (excluding land attracting a General rate)		68%	68%	pa.	0.0%
Kindergarten School		68%	68%	pa.	0.0%
Government Properties (excluding Toogoolawah		105%	105%	pa.	0.0%
Toogoolawah High School		158%	158%	pa.	0.0%
General non-residential		100%	100%	pa.	0.0%
For each additional pedestal, urinal and slop sink:		Per pedestal	Per pedestal		
Building used exclusively for public worship		5% of base charge	5% of base charge		
Hall		5%	5%		0.0%
Kindergarten School		5%	5%		0.0%
Properties where toilet facilities are made		12%	12%		0.0%
Properties where toilet facilities are made available for customer use:		Per pedestal	Per pedestal		
Hotel or Motel		38% of base charge	38% of base charge	pa.	
Nursing Home		38%	38%	pa.	0.0%
Caravan Park facility provided for the ordinary		12%	12%	pa.	0.0%
Government Properties (excluding Toogoolawah		105%	105%	pa.	0.0%
Toogoolawah High School		158%	158%	pa.	0.0%
Other Properties		19%	19%	pa.	0.0%
Racecourse and showgrounds - single charge for		5%	5%	pa.	0.0%
Public Convenience		50%	50%	pa.	0.0%
Allotment to which Council is prepared to provide a sewerage service, but which is not supplied with a sewerage service		50%	50%	pa.	0.0%
Sewerage charges in respect of Vacant Land - per allotment		50%	50%	pa.	0.0%

Alternate Water Sources	Volume Charge Tier	2012/13	2013/14	Unit	% increase
Metered Standpipes (potable water) - all districts					
Deposit (refundable)		$1,700.00	$1,800.00		5.9%
Standpipe long term lease per standpipe (billed quarterly)			$600.00	pa.	
Standpipe short term lease per standpipe (billed quarterly)			$50.00	pm.	
Standpipe lease (billed quarterly)			$600.00	pa.	
Permit fee (billed quarterly)			$400.00	pa.	
Consumption charge (including bulk water cost)			$3.720000	/kL	
Brisbane					
permit to use a standpipe (per customer)		$389.00			
Tier 1 Consumption	<=200kL	$0.800292			
Tier 2 Consumption	201-300kL	$0.914616			
Tier 3 Consumption	>300kL	$1.340748			
State Government Bulk Water Charge	per kL	$2.057000			
Ipswich					
Deposit (refundable)		$1,600.00			
QUU Volume Charge		$1.424580			
State Government Bulk Water Charge		$1.993000			
Combined Consumption Charge		$3.417580			
Lockyer Valley, Scenic Rim and Somerset					
Deposit (refundable)		$1,600.00			
Combined volume charge (as per Ipswich)		$3.417580			
Tanker Filling Stations (potable water) - all districts					
Consumption charge			$3.720000	/kL	
Tanker filling station - coin operated			$0.500000	/150l	
Card issue - (Ipswich)			$30.00	per issue	
Bond - Filling Station Key (Lockyer Valley)			$230.00	each	
iTag Deposit (refundable) (Scenic Rim)			$23.00	each	
Lease of Filling Station (Somerset)			$230.00	per annum	
Ipswich					
Tanker filling station - coin operated	per 150 litres	$0.500000		/150l	
Tanker filling station - smart card					
Card issue		$25.00			
Consumption charge		$1.424580		/kL	
State Government Bulk Water Charge		$1.993000		/kL	
Combined Consumption Charge		$3.417580		/kL	
Lockyer Valley					
Bond (Filling Station Key)		$220.00		each	
Volume charge		$1.236873		/kl	
State Government Bulk Water Charge		$2.250000		/kl	
Combined charge		$3.486873		/kL	
Tanker filling station - coin operated	per 150 litres	$0.500000		/150l	
Tanker filling station - ITag and logbook		$3.200000		/kl	
Scenic Rim					
iTag Deposit (refundable)		$22.00		pa.	
Water Volume		$1.055850		/kL	
State Government Bulk Water Charge		$2.358000		/kl	
Combined charge		$3.413850		/kL	
Somerset					
Lease of Filling Station		$219.50		each	
Water Consumption		$0.336438		/kL	
State Government Bulk Water Charge		$2.627000		/kl	
Combined charge		$2.963438		/kL	
Tanker filling station - coin operated	per 150 litres	$0.500000		/150l	
Alternate Source Water					
Class A Water					
Brisbane	per kL	$1.118592	$1.162212	/kL	3.9%
Ipswich		$1.034964	$1.075332	/kL	3.9%
Class C Water					
All districts	per kL	$0.100000	$0.100000	/kL	0.0%

APPENDIX C: QUU SUNDRY CHARGES[49]

REGISTER OF SUNDRY FEES & CHARGES EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014	QUU Wide			
Description	**Unit /measure**	**2012-13**	**2013-14**	
		$	**$**	**% increase**
Water Supply Services				
Testing of water meters (by request)				
On site testing of 20mm (inc call out charge)	Each		255.00	
Call out charge	Each		75.00	
Laboratory - Barwon Water (default testing site)				
Laboratory testing of 20mm meters	Each		283.00	
Laboratory testing of 25mm meters	Each		365.00	
Laboratory testing of 32mm meters	Each		518.00	
Laboratory testing of 40mm meters	Each		702.00	
Laboratory testing of 50mm meters	Each		1,032.00	
Laboratory testing of 80mm meters	Each		1,150.00	
Laboratory testing of 100mm meters	Each		1,378.00	
Laboratory - Manly Hydraulics				
Laboratory testing of 20mm meters	Each		327.00	
Laboratory testing of 25mm meters	Each		430.00	
Laboratory testing of 32mm meters	Each		526.00	
Laboratory testing of 40mm meters	Each		964.00	
Laboratory - Veolia				
Laboratory testing of 20mm meters	Each		364.00	
Laboratory testing of 25mm meters	Each		469.00	
Laboratory testing of 32mm meters	Each		600.00	
Laboratory testing of 40mm meters	Each		699.00	
Laboratory testing of 50mm meters	Each		1,064.00	
Laboratory testing of 80mm meters	Each		1,146.00	
Laboratory testing of 100mm meters	Each		1,388.00	
Special reading of water meter	Per Assessment		77.00	
Miscellaneous Services				
Photocopying				
A4 B&W	Each Page	0.76	0.78	2.6%
Colour	Each Page	4.58	4.75	3.7%
A3 B&W	Each Page	0.92	0.95	3.3%
Colour	Each Page	5.52	5.73	3.8%
Credit card payment surcharge	For each dollar paid by credit c	0.72%	0.72%	0.0%
Dishonoured payments administration charges	Each transaction plus Bank Cha	23.35	24.26	3.9%

[49] QUU wide charges for testing of water meters have been rationalised in 2013-14 and replace different charges in each council area in 2012-13. The % increase in 2013-14 therefore varies by council area as noted in chapter 1, with a three-fold increase in the Lockyer Valley.

REGISTER OF SUNDRY FEES & CHARGES EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014	BRISBANE			
Description	**Unit /measure**	**2012-13**	**2013-14**	
		$	**$**	**% increase**
Water Supply Services				
Water Connection				
Full connection installation including meter by developer (administration and inspection by council)	Each	By Quote	By Quote	
Sewerage Services				
Garbage Grinders for Commercial Premises i.e. other than dwelling houses				
Up to and including 1/2 horsepower motor	Each year	534.50	555.00	3.8%
Above 1/2 horsepower and up to and including 3/4 horsepower mo	Each year	2,487.00	2,583.50	3.9%
Above 3/4 horsepower motor	Each year	4,666.50	4,848.00	3.9%
Public hospitals and charitable institutions		50% of prescribed charge	50% of prescribed charge	
Tankered Waste Discharge to sewage treatment plant (Luggage Point only)				
Deemed quality	Per Kilolitre	30.39	31.58	3.9%

REGISTER OF SUNDRY FEES & CHARGES EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014	IPSWICH			
Description	**Unit /measure**	**2012-13**	**2012-13**	
		$	**$**	**% increase**
Water Supply Services				
Water Connection				
(a) Full connection installation by developer	Each	230.00	238.50	3.7%
(b) Full 20 mm residential service	Each	909.50	944.50	3.8%
(c) All other service connections	Each	By quote	By quote	
(d) Termination of 20mm water service	Each	399.00	414.50	3.9%
(e) Termination of any service other than 20mm	Each	By quote	By quote	
Water Meters				
(a) Supply and fit meter to any other services	Each	By quote	By quote	
(b) Re-locate 20mm above ground meter to below ground (residential services)	Each	328.00	340.50	3.8%
(c) Re-locate above ground meter to below ground (other services)	Each	By quote	By quote	
(d) Re-location of one meter to alternate location	Each	328.00	340.50	3.8%
(e) Re-location of more than one meter to alternate location	Each	By quote	By quote	
Water Mains				
(a) Pressure/flow test from a hydrant at site	Per Test	377.00	391.50	3.8%
(b) Location of mains at site (without excavation)	Per Visit	175.00	181.50	3.7%
Sewerage Services				
* To disconnect house drain from sewer	Each	656.50	682.00	3.9%
Provision of additional connection to existing sewer:				
Depth of sewer:				
- Up to 1.5m*		By Quote	By Quote	
-1.5m to 3.0m*		By Quote	By Quote	
- Over 3.0m		By Quote	By Quote	
* Approval and inspection of the provision of additional connection to existing sewer (owner installed house connection branches)		296.00	307.50	3.9%
* These prices as quoted are when job does not include access restriction, rock excavation or any other obstruction causing delays.				
Clearing blocked private drains:				
During normal working hours - first 1/2 hours at site		199.00	206.50	3.8%
During normal working hours - each additional 1/2 hour or part thereof at site		101.50	105.00	3.4%
Special "Call-Out" Rate - first 1/2 hour at site		270.50	281.00	3.9%
Special "Call-Out" Rate - each 1/2 hour or part thereof at site		120.50	125.00	3.7%
Location of sewer main at Site per visit (without excavation)*		98.50	102.00	3.6%
Location of Property connection (with excavation)*		By Quote	By Quote	
* GST-free status will not apply if for a contestable service				
Tankered Waste Discharge to sewage treatment plant (Bundamba only)				
Per discharge	per transaction	65.00	67.54	3.9%
Deemed quality	Per Kilolitre	3.28	3.41	4.0%

REGISTER OF SUNDRY FEES & CHARGES EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014	LOCKYER VALLEY			
Description	**Unit /measure**	**2012-13**	**2013-14**	
		$	**$**	**% increase**
Water Supply Services				
Water Connection				
20mm (3/4") Water service connection	Each	679.00	705.00	3.8%
Disconnection of Service at meter (by request)	Each	147.50	153.00	3.7%
Disconnection of Service at main (by request)	Each	591.50	614.50	3.9%
Connection of disconnected service (by request)	Each	679.00	705.00	3.8%
25mm (1") up to 20.00m in length	Each	1,013.00	1,052.50	3.9%
32mm (1-1/4") up to 20.00m in length	Each	1,479.00	1,536.50	3.9%
40mm (1-1/2") up to 20.00m in length	Each	1,807.50	1,877.50	3.9%
50mm (2") up to 20.00m in length	Each	2,191.00	2,276.00	3.9%
100mm	Each	By quote	By quote	
Meter to Multi-Unit Developments				
(1 meter per unit, plus 1 body corporate meter)				
1-3 Meters				
1st meter	Each	679.00	705.00	3.8%
Successive meters	Each	459.50	477.00	3.8%
4-8 Meters				
1st meter	Each	1,019.00	1,058.50	3.9%
Successive meters	Each	350.00	363.50	3.0%
8+ Meters				
1st meter	Each	1,807.50	1,877.50	3.9%
Successive meters	Each	350.00	363.50	3.0%
Fire Service Approval				
Installation of fire hydrants and/or fire reels including scrutiny, inspections and final compliance certificate up to three	Each	383.50	398.00	3.0%
- more than 3 applications	Each	87.50	90.50	3.0%
Sewerage Services				
Sewerage connections				
Connection		By quote	By quote	
Disconnection		By quote	By quote	
Connection to QUU's sewer Main		By quote	By quote	
Disconnection from QUU's Sewer		By quote	By quote	
Tankered Waste Discharge to sewage treatment plant (Gatton only)				
Deemed quality	Per Kilolitre	27.12	28.18	3.9%

REGISTER OF SUNDRY FEES & CHARGES EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014	SCENIC RIM			
Description	**Unit /measure**	**2012-13**	**2013-14**	
		$	**$**	**% increase**
Water Supply Services				
Water Connection				
20mm domestic Service - install water meter only	Each	739.00	767.50	3.9%
20mm domestic Service - install infrastructure and water met	Each	1,204.50	1,251.00	3.9%
25mm	Each	By quote	By quote	
32mm	Each	By quote	By quote	
40mm	Each	By quote	By quote	
50mm	Each	By quote	By quote	
Larger Diameters and Bypass Meters	Each	By quote	By quote	
Disconnection Fee	Each	208.50	216.50	3.8%
Other Charges (both Water and Sewerage)				
Location of underground services*		84.51	87.80	3.9%
Callout to damaged underground services*		180.50	187.53	3.9%
# Minimum charge plus person, plant, equipment and materials				
* GST-free status will not apply if for a contestable service				
Sewerage Services				
Sewerage connections and disconnections	Each	191.50	198.50	3.0%
Tankered Waste Discharge to sewage treatment plant (Beaudesert only)				
Deemed quality	Per Kilolitre or part thereof	16.43	17.07	3.9%

REGISTER OF SUNDRY FEES & CHARGES **SOMERSET**
EFFECTIVE: 1st JULY 2013 - 30th JUNE 2014

Description	Unit /measure	2012-13	2013-14	
		$	$	% increase
Water Supply Services				
Water Connection				
20mm domestic Service - install water meter only	Each	872.00	906.00	3.9%
20mm domestic Service - install infrastructure and water met	Each	By quote	By quote	
25mm	Each	By quote	By quote	
32mm	Each	By quote	By quote	
40mm	Each	By quote	By quote	
50mm	Each	By quote	By quote	
Larger Diameters and Bypass Meters	Each	By quote	By quote	
Disconnect fee	Each	172.50	179.00	2.8%
Sewerage Services				
Sewerage connections and disconnections				
Installation of jump up (sewerage connection) at depth of less than 1.5 metres (within declared sewerage area)	Each	833.00	865.00	3.8%
Deeper connections or connections outside of declared sewer area		by quote	by quote	
Sewer disconnection	Each	293.50	304.50	3.7%
Tankered Waste Discharge to sewage treatment plant (Esk & Kilcoy only)				
Deemed quality	Per kilolitre + after hours fee	22.28	23.15	3.9%
Plus if after hours		161.06	167.34	3.9%

APPENDIX D: RESIDENTIAL BILL CALCULATIONS

Change in Residential Bills – QUU vs QCA

	QUU (149kl/yr)			*QCA (200kl/yr)*		
	2012-13	*2013-14*	*%*	*2012-13*	*2013-14*	*%*
Brisbane						
Retail water access	167.16	173.64	3.9%	167.16	173.64	3.9%
Retail water use	99.37	103.24	3.9%	133.38	138.58	3.9%
Retail sewerage access	475.92	494.52	3.9%	475.92	494.52	3.9%
Bulk water	306.49	343.00	11.9%	411.40	460.40	11.9%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,048.94**	**$1,114.40**	**6.2%**	**$1,107.86**	**$1,267.14**	**14.4%**
Ipswich						
Retail water access	280.00	290.88	3.9%	280.00	290.88	3.9%
Retail water use	120.77	125.48	3.9%	162.11	168.43	3.9%
Retail sewerage access	550.00	571.44	3.9%	550.00	571.44	3.9%
Bulk water	296.96	333.46	12.3%	398.60	447.60	12.3%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,247.73**	**$1,321.26**	**5.9%**	**$1,310.71**	**$1,478.35**	**12.8%**
Somerset						
Retail water access	280.00	290.88	3.9%	280.00	290.88	3.9%
Retail water use	35.16	36.53	3.9%	47.20	49.04	3.9%
Retail sewerage access	500.00	519.48	3.9%	500.00	519.48	3.9%
Bulk water	391.39	427.93	9.3%	525.35	574.40	9.3%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,206.55**	**$1,274.82**	**5.7%**	**$1,272.55**	**$1,433.80**	**12.7%**
Scenic Rim						
Retail water access	280.00	290.88	3.9%	280.00	290.88	3.9%
Retail water use	123.83	128.66	3.9%	166.21	172.69	3.9%
Retail sewerage access	500.00	519.48	3.9%	500.00	519.48	3.9%
Bulk water	351.26	387.70	10.4%	471.49	520.40	10.4%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,255.09**	**$1,326.72**	**5.7%**	**$1,337.70**	**$1,503.45**	**12.4%**
Lockyer Valley						
Retail water access	280.00	290.88	3.9%	280.00	290.88	3.9%
Retail water use	33.63	34.94	3.9%	45.14	46.90	3.9%

	QUU (149kl/yr)			*QCA (200kl/yr)*		
Retail sewerage access	420.84	437.28	3.9%	420.84	437.28	3.9%
Bulk water	335.25	371.76	10.9%	450.00	499.00	10.9%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,069.72**	**$1,134.86**	**6.1%**	**$1,115.98**	**$1,274.06**	**14.2%**

GLOSSARY OF ACRONYMS, TERMS AND CONDITIONS

A	
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
B	
BCC	Brisbane City Council
C	
CEO	Chief Executive Officer
CoMSEQ	Council of Mayors South East Queensland
CPI	Consumer Price Index
D	
Design and Construction Code	SEQ Water Supply and Sewerage Design and Construction Code
DR Act	*South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld)
DEWS	Department of Energy and Water Supply
DSDIP	Department of State Development, Infrastructure and Planning
E	
Entity	SEQ service provider as defined by the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld)
EP	Equivalent Persons
F	
FTE	Full Time Equivalent
G	
H	
I	
ICT	Information and Communications Technology
IWA	International Water Association
J	
K	
kl	Kilolitres
km	Kilometres
L	
l/c/d	Litres per connection per day
l/p/d	Litres per person per day

M	
m	Million
ML	Megalitres
mm	Millimetres
MAR	Maximum Allowable Revenue
MCA	Multi Criteria Analysis
N	
N/A	Not Applicable
NPV	Net Present Value
O	
OESR	Office of Economic and Statistical Research
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
S	
SEQ	South East Queensland
SEQ Regional Plan	*South East Queensland Regional Plan 2009-2031*
SKM	Sinclair Knight Merz
SPA	*Sustainable Planning Act 2009* (Qld)
STP	Sewage Treatment Plant
T	
U	
V	
W	
WACC	Weighted Average Cost of Capital
WSAA	Water Services Association of Australia
WSZ	Water Supply Zone

X

Y

YTD	Year to Date

Z

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