Queensland Competition Authority

Draft Report

SEQ Price Monitoring for 2013-15 Part B – Unitywater

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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 (the 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.

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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).

Unitywater noted that in 2012-13, the Noosa referendum passed a motion to de-amalgamate from Sunshine Coast Regional Council. The reconstituted Noosa Shire Council was expected to be established by 1 January 2014 and would become a third participating council. Unitywater will continue to provide water and sewerage services for Noosa residents and businesses.

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 Unitywater's water and sewerage services

Unitywater provides distribution and retail water and sewerage services to 722,030 residents in the Sunshine Coast and Moreton Bay local government areas.

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

Table 1 Unitywater Service and Asset Base as at 30 June 2012

	Moreton Bay	***Sunshine Coast***	***Total***
Population	399,406	322,624	722,030
Residential Water Connections	142,737	124,373	267,110
Non-residential water connections	6,721	8,486	15,207
Water reservoirs	43	65	108
Water supply network (km)	3,087	2,455	5,542
Sewerage network (km)	2,839	2,513	5,352
Sewage treatment plants	8	10	18

Note: Population and connections data as at 30 June 2012. Due to timing, this data differs from the average Unitywater connections for 2012-13 in chapter 3 which also exclude offsets. Source: Unitywater (2013a).

Figure 1 Unitywater service territory

Source: Unitywater (2012).

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 the change in revenues for non-capped services (trade waste, seepage and recycled water and one-off sundry services) with the change in costs of the activity is therefore no longer reported. The change in these prices is still identified.

The comparison of Unitywater'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

Unitywater noted that, after being restructured (see below), the fixed and volumetric components of prices for distribution and retail water and sewerage services (exclusive of the bulk charge) to stand-alone residential houses would increase by 3%.

All other properties would receive a 3% increase to the prices of existing distribution and retail water and sewerage services until they move onto the new price structure, being phased in progressively for sporting groups (1 October 2013), residential vacant land (1 January 2014), residential unit complexes (by June 2014) and all other customers over the period to 30 June 2015.

2.2.1 Change in tariff structure

Customer control over bills

Unitywater stated that customer research in late 2012 indicated that its customers supported a change towards a more user-pays system for water and sewerage. Customer research was undertaken via an online survey, with 1,195 online surveys (601 in Moreton Bay and 594 in Sunshine Coast) completed between 24 September 2012 and 10 October 2012.

[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.

In May 2013, Unitywater stated that the new user-pays pricing structure would allow users more control over bills. For stand-alone residential customers from 1 July 2013, Unitywater announced:

(a) that customers in Moreton Bay would pay $102 less in annual water and sewerage fixed access charges, and customers in Sunshine Coast would pay $61 less in fixed charges

(b) a standard two tiers of water usage charges across the region, with an increase in the threshold for tier one. The first tier of water usage charges would be $0.644 per kilolitre (kl), up to 822 litres per day (l/day). Higher water usage (the second tier) would be $1.288 per kl

(c) a new charge for the volume of sewage discharged. The volume of sewage produced would be calculated as 90% of water used by a household. The sewage usage charge is $0.644 per kl up to a maximum of 740l/day.

The QCA notes that Unitywater did not cite cost-reflectivity as a factor underlying the change in tariff structure. The QCA considers that tariff structures should also reflect underlying costs. Typically, variable charges should reflect long-run marginal costs. The QCA has requested but has not been provided with Unitywater's fixed and variable costs underpinning its changes to tariff structure.

Unitywater stated that enhancing user pays has the potential to reduce demand in the long term, pushing expensive infrastructure investments back, resulting in significant cost savings. Unitywater did not quantify the anticipated savings.

Revenue-neutrality

Unitywater stated that the change in tariff structure was designed to be revenue neutral, based on forecast 2012-13 revenue with a 3% price increase then applied to the new tariffs.

The QCA investigated the process adopted by Unitywater to ensure revenue neutrality.

Unitywater adopted expected residential non-bulk revenues for 2012-13 from its billing system in early 2013 ($259.7m) for the revenue target for 2013-14 prices, following the change in tariff structure.

There were a range of risks identified in this process, including that the change in tariff structure would reduce water use and issues arising from inconsistent categorisation of customers as residential or non-residential. To account for these risks, a revenue buffer (of around 1.5% of residential revenues) was applied, based on advice from an external consultant. After accounting for risk, Unitywater forecast no change in revenue arising from the change in tariff structure.

Prices were then increased by 3% to fund cost increases and for consistency with other customers not subject to tariff reform in 2013-14 (see further below).

Modelling of changes in tariff structure was undertaken separately from the budget (revenue) process. As a result, there is no direct reconciliation between actual prices and Unitywater's revenue forecast for 2013-14. However, the QCA notes there is only a small difference in the revenues used for modelling the change in tariff structure ($259.7 million) and the residential non-bulk revenue forecast adopted in the budget processes ($264.2 million). The QCA has used the higher revenue estimate for this review (chapters 3 and 7).

90% discharge factor

The QCA requested and was provided with the information underpinning Unitywater's choice of a 90% discharge factor for residential sewerage use.

Unitywater referred to a range of factors including:

(a) 63% of households surveyed prefer a user pays sewerage tariff structure over a fixed charge

(b) it is impractical to meter actual discharges into the sewer system. However, discharge volumes to sewer are related to the use of potable water for certain purposes (e.g. showers, flushing toilets, washing clothes, washing dishes for residential customers)

(c) the high level conclusions of the SEQ Residential End Use Study, that on average 89% of water used was returned to the sewerage network[2]

(d) sewerage charging practices by other water utilities, including that:

  (i) the three Victorian metropolitan retail water providers assume a 90% discharge factor

  (ii) the three Victorian metropolitan retailers' discharge factor is supplemented with a seasonal factor for houses and units, which reduces the discharge factor in the non-winter months. This reflects greater outdoor use in those months and less discharge to the sewer.

  Unitywater stated a seasonal factor was not required for its service area which has less volatility in water usage. However, Unitywater applied a cap on the sewerage volumetric charge to allow for higher outdoor usage during warmer periods

  (iii) San Francisco uses a discharge factor of 90% for single-family residential users and non-residential users and 95% for multi-family residential users

(e) scenario analysis based on a variety of households that indicated residential discharges ranging from 80% (large garden and pool) to 96% (unit, no garden or pool)

(f) tailored discharge factors by customer or individual metering of discharges were not economically feasible. Unitywater noted it has therefore developed a process to allow customers to challenge their discharge factor.

2.2.2 Price increases

3% increase in 2013-14

The QCA can confirm that Unitywater's water and sewerage prices that were not subject to a change in tariff structure increased by 3% in 2013-14, as noted in **Appendix B**.

The QCA notes that the 3% increase in water and sewerage charges is more than the CPI of 2.1%.[3] 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.

[2] Urban Water Security Research Alliance Technical Report No 47; C Beal and R Stewart; South East Queensland Residential End Use Study: Final Report, November 2011; p119.
[3] March to March Brisbane All Groups for the preceding year.

As noted above, the 3% price increase in 2013-14 excludes the impact of tariff restructuring, bulk water prices and government subsidies or rebates. The actual impact on customers requires consideration of all changes which affect their bill (see below).

Unitywater also noted that bulk water charges had increased by 11.2% in Moreton Bay and 15.2% for the Sunshine Coast, and Unitywater was obliged to pass this through to customers. Further, the Moreton Bay Regional Council subsidy was due to expire on 30 June 2013.

Trade waste, recycled water and sundry charges

Trade waste permit fees and strength charges (see **Appendix B**) also increased by 3% in 2013-14. Trade waste volumetric charges were harmonised across council areas, with some components increasing while others fell. Unitywater has continued harmonisation as noted in previous reviews.

Recycled water charges have increased up to 30% for some residential dual reticulation users and up to 225% for the supply of Class B recycled water. In previous reviews Unitywater stated the recycled water price path was designed to recover the operational costs of providing recycled water. The QCA notes that recycled water prices remain below the comparable potable water charge (as bulk water charges are avoided).

Some sundry charges were rationalised in 2013-14, with some prices increasing (up to 133%) while others fell (by up to 36%). The revenues from these price increases are incorporated in the comparison of revenues and the MAR.

Pricing Principles Review

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

2014-15 prices

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

However, Unitywater has not published prices for 2014-15. In its 2013-15 price monitoring submission, Unitywater provided an indicative revenue forecast for 2014-15 rather than a revenue forecast based on individual prices. Unitywater stated this is because budgets are set annually and it is reviewing various required inputs, including the discharge factors required to set non-residential volumetric sewerage prices in 2014-15.

As Unitywater 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 Unitywater'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 should be notified, with any updates being provided in a consistent and timely manner.

In information released in May 2013, Unitywater calculated the changes in annual 2013-14 bills for a variety of households in stand-alone houses, ranging from a lower water user on 80l/day –

e.g. a single pensioner - to a large water user on 1,320l/day (e.g. large family plus garden or pool, or acreage with irrigation system). For example:

(a) for an average Sunshine Coast two-adult two-child household using 573l/day (209kl/year), Unitywater estimated their 2013-14 bill would increase by $133, from $1,252 in 2012-13 [a 10.7% increase]

(b) for an average Moreton Bay two-adult two-child household using 550l/day (201kl/year), Unitywater estimated their 2013-14 bill would increase by $158, from $1,566 in 2012-13 [a 10.1% increase].

However, the QCA notes that residential bills for detached dwellings will increase by more than that indicated by Unitywater (see **Appendix C**). The QCA estimates that residential bills for a household using 200kl of water a year will increase by 17.8% in the Sunshine Coast, 28.0% in Caboolture, 25.3% in Pine Rivers and 38.8% in Redcliffe. This is a much higher increase than indicated by Unitywater.[4]

The higher increase calculated by the QCA is predominantly due to the removal of government rebates. The State Government provided a one-off $80 bulk water rebate to residential customers in 2012-13.[5] Moreton Bay Regional Council provided rebates towards water and sewerage bills in 2012-13 of $140.00 in Caboolture, $111.12 in Pine Rivers and $244.72 in Redcliffe. These rebates no longer apply.

Unitywater excluded government rebates from its residential bill calculations as they are outside its control. The QCA has included these rebates as they affect the bill paid by residential customers.

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 about increases in bills in 2013-14.

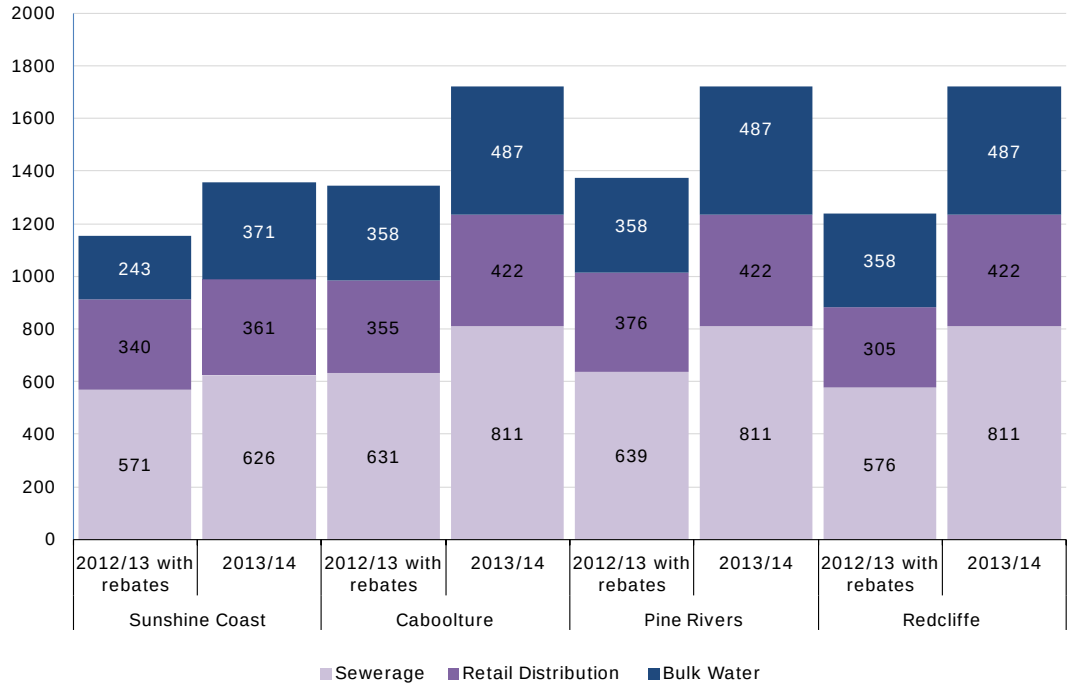
The QCA recommends that retail water providers provide their customers with comprehensive information that identifies the increase in each component of the bill and the overall (net) increase, with any updates being provided in a consistent and timely manner.

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

[4] As in previous price monitoring reports, the residential bills in the QCA's analysis are calculated on detached dwellings using 200kl of water per year. The standard 200kl usage allows for price comparisons across SEQ and is used for national performance reporting (NWC 2010). Unitywater adopted an average two-adult two-child household usage of 209kl in Sunshine Coast and 201kl in Moreton Bay, reflecting the actual usage patterns in these council areas.

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

Figure 2 Residential bills ($ per year)



Note: Assumes 200kl of water per year and one pedestal (where relevant). The bulk water rebate was a one-off $80 deduction to the residential bill in 2012-13. Moreton Bay Regional Council provided rebates towards water and sewerage bills in 2012-13 in Caboolture, Pine Rivers and Redcliffe. These rebates no longer apply. See Appendix C 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 and noted that Unitywater had already released such information.

QCOSS commended Unitywater for its release of information on the impact of their 2013-14 prices on different types of customers based on usage.

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 review the distribution of levels of usage across household types, as that is contained in detailed billing data that is not collected under price monitoring.

While information released by Unitywater described the impact on a range of household types, the QCA recognises that customers may benefit from more information, if appropriately packaged and targeted. The QCA therefore recommends that, going forward, Unitywater should consult with QCOSS and other stakeholders 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 does for electricity).

Unitywater's financial hardship policy seeks to provide a framework for customers who are suffering financial hardship to apply for an instalment plan to ensure payment of their account within a reasonable timeframe. Unitywater's objective is to assist customers in arriving at a satisfactory resolution and protect the customers from debt recovery action.

Unitywater stated that it is committed to keeping customers and stakeholders informed, including through:

(a) its community advisory group, which consists of nine members representing community and the business sectors and meets quarterly to provide feedback to Unitywater on community and business needs

(b) regular briefings to community organisations and other groups on relevant topics

(c) customers research forums which gauge the effectiveness of communications and gain feedback on planned initiatives

(d) online material and printed material mailed with customer accounts

(e) its obligations under the customer charter to inform customers of planned interruptions

(f) its use of Facebook and You Tube as complementary means of communicating with targeted customers.

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, as well as on the prices paid.

3.2 Water

3.2.1 Residential

Forecasting methodology

Unitywater forecast water volumes by multiplying connected population by an underlying level of consumption (in litres) per person per day (l/p/d). Total residential water volume was then apportioned to the consumption tiers, based on actual water demand during the first half of 2012-13. To progress demand forecasting, Unitywater sought the QCA's endorsement and participation in a regional working group to discuss demand forecasting.

The QCA notes that Unitywater'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

Unitywater forecast water connections by applying an annual growth rate to the previous financial year's June connections. Connections for June 2013 were estimated using data from its billing system.

Unitywater noted that it had contacted the OESR for advice on the appropriate growth rate. The OESR was unable to direct it to a specific growth forecast. Therefore, Unitywater used the OESR medium dwelling series, as used by its participating councils. Unitywater used the compound annual growth rates (CAGR) between 2010-11 and 2015-16 of 2.39% for Moreton Bay and 2.30% for Sunshine Coast.

Unitywater distributed the total annual forecast connections in a non-uniform fashion throughout the year, based on historical data (Table 2 refers). Unitywater then calculated the average connections in any year by weighting its monthly forecasts by the number of days in the corresponding month.

Table 2: Distribution of new connections (%)

	Jul	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Phasing	8.3%	8.3%	8.3%	8.3%	8.3%	6.7%	6.7%	8.3%	8.3%	8.3%	10.0%	10.0%

Source: Unitywater utility revenue budget (Unitywater 2013c).

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. 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 QCA derives these growth rates by using OESR's annual population data and interpolated occupancy rates.

While a departure from official growth forecasts may be justified on the basis of more recent data, historical data on a consistent basis is not available for Unitywater. Unitywater noted that its new billing engine, which has been operating smoothly for over 18 months, and the demand management and tracking tool scheduled to be up and running by 2014, will enable it to compare actual growth with OESR's forecasts in the future.

Pending this information, the QCA has continued to apply OESR low growth rates.

Table 3: Connection growth rates applied

Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Moreton Bay	2.22%	2.39%	1.83%	2.39%	1.83%
Sunshine Coast	1.97%	2.30%	1.87%	2.30%	1.87%

Note: Connections growth rates applied to June connections of previous financial year under Unitywater's methodology. Source: Unitywater (2013c).

For 2013-14, the OESR growth rates applied in Unitywater's models (Table 2) differs from the growth in average connections (Table 3). As noted above, Unitywater applied the OESR growth rate to June connections in the previous financial year to form total connections, which were then distributed throughout the year and weighted to form an annual average. However, the distribution of actual connections in 2012-13 differed from the assumed distribution in 2013-14, so the growth in average connections differs from the OESR rate.

The growth rates would be the same if the OESR rate was applied to average (mid-year) connections (instead of end of year connections). The QCA recommends that Unitywater consider this approach going forward.

For 2014-15, the OESR growth rates (Table 3) are the same as the growth in average connections (Table 4) as the distribution of connections is the same in both years.

The QCA has adopted Unitywater's methodology, but applied the growth rates that are consistent with the OESR's low population series.

Table 4: Average residential water connections

Council	*2012-13*	*2013-14*				*2014-15*			
		Unitywater		*QCA*		*Unitywater*		*QCA*	
		#	*Growth*	*#*	*Growth*	*#*	*Growth*	*#*	*Growth*
Moreton Bay	139,853	143,081	2.31%	142,660	2.01%	146,507	2.39%	145,269	1.83%
Sunshine Coast	125,001	127,755	2.20%	127,467	1.97%	130,699	2.30%	129,849	1.87%
Total	**264,854**	**270,836**	**2.26%**	**270,127**	**1.99%**	**277,206**	**2.35%**	**275,118**	**1.85%**

Source: Unitywater (2013c), OESR (2011).

Connected Population

Unitywater forecast connected population by applying medium OESR population growth rates to the previous year's June estimate. Connected population for June 2013 was based on estimated actual connections from its billing system and assumptions about occupancy rates. An occupancy rate of 2.7 was applied for Moreton Bay and 2.5 for Sunshine Coast. Unitywater distributed population growth in a non-uniform fashion throughout the year.

The QCA has applied growth rates from the OESR's low population series, as noted above.

Table 5: Connected population consuming water

Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Residential connections consuming water (%)					
Moreton Bay	98.53	98.74	98.74	98.74	98.74
Sunshine Coast	96.31	96.37	96.37	96.39	96.39
Total	97.49	97.62	97.62	97.62	97.62
Residential connections consuming water (number)					
Moreton Bay	137,804	141,285	140,869	144,668	143,445
Sunshine Coast	120,393	123,118	122,840	125,954	125,136
Total	258,197	264,403	263,709	270,622	268,580
Occupancy rates (number)					
Moreton Bay	2.70	2.70	2.70	2.70	2.70
Sunshine Coast	2.50	2.50	2.50	2.50	2.50
Population growth rates applied (%)					
Moreton Bay		2.00	1.47%	2.00	1.47%
Sunshine Coast		2.17	1.78%	2.17	1.78%
Residential connected population (Number)					
Moreton Bay	372,020	380,679	379,630	388,277	385,197
Sunshine Coast	300,983	307,576	306,949	314,243	312,398
Total	**673,052**	**688,255**	**686,579**	**702,520**	**697,595**

Source: Unitywater (2013), QCA calculations.

Consumption per person (l/p/d)

Unitywater applied the growth rates in l/p/d in SKM's draft report for the 2012-13 price monitoring review to its estimated actual average consumption for 2012-13. Unitywater did not cap its average consumption as in previous years.[6]

[6] In the 2012-13 review, Unitywater applied a cap of 200 l/p/d across both council areas, to reflect the voluntary target for the whole of SEQ.

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 increase over the 5 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 Unitywater's council areas by assuming rebound to a whole-of-SEQ forecast of 185 l/p/d in 2016-17.

In previous reviews, the QCA has stated that price elasticity should be explicitly included in demand forecasting once the estimated level of rebound is achieved. The QCA notes that for 2013-14, Unitywater has separately taken into account the risk of a reduction in demand arising from its changes to tariff structure in a separate modelling exercise (as well as the risks arising from incorrect customer categorisation) as noted in chapter 2. The impact is therefore not included in the data below.

Following this approach, the QCA's estimate of average consumption in 2013-14 and 2014-15 is lower than Unitywater's. Table 6 refers.

Table 6: Residential Water Volume (ML)

Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Residential l/p/d					
Moreton Bay	164.0	170	164.4	176	164.9
Sunshine Coast	191.2	199	191.8	206	192.4
Residential Volume (ML)					
Moreton Bay	22,272	23,652	22,792	25,007	23,190
Sunshine Coast	21,019	22,319	21,513	23,659	21,955
Total	**43,291**	**45,972**	**44,306**	**48,666**	**45,144**

Source: Unitywater URB (2013), OESR (2011), QWC (2012), QCA calculations.

3.2.2 Non-residential

Forecasting Methodology

Unitywater forecast non-residential water volumes by multiplying the number of non-residential connections by consumption (in litres) per connection per day (l/c/d). Total water volume was apportioned to tiers on the basis of actual water demand during 2012-13.

Unitywater applied OESR medium growth rates to its 2012-13 connections using the same methodology as for residential water connections.

Equivalent Persons (EPs) v Connections

The QCA notes that Unitywater adopted SKM's recommendation in the 2012-13 review to move away from average non-residential consumption per EP to average consumption per

connection. Using connections is superior, as this information can be readily extracted from the billing system.

As for residential water connections, the QCA has applied OESR low growth rates.

Table 7: Non-residential water connections consuming water

Council	*2012-13*	*2013-14*				*2014-15*			
		Unitywater		*QCA*		*Unitywater*		*QCA*	
		#	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*
Moreton Bay	8,522	8,787	3.11%	8,761	2.80%	8,998	2.39%	8,922	1.83%
Sunshine Coast	12,560	12,834	2.18%	12,805	1.95%	13,130	2.30%	13,045	1.87%
Total	**21,085**	**21,621**	**2.56%**	**21,567**	**2.30%**	**22,128**	**2.34%**	**21,966**	**1.85%**

Source: Unitywater URB (2013), OESR (2011), QCA calculations.

Consumption per connection (l/c/d)

As in the 2012-13 review, Unitywater does not expect any rebound for its non-residential customers and did not apply any growth to average non-residential consumption. Unitywater applied seasonal factors to account for monthly variation in water demand.

As historical data on a consistent basis is not available for Unitywater, and as businesses do not usually have significant discretionary and outdoor water use, the QCA accepts the no-growth assumption for non-residential average consumption.

The QCA's forecast of non-residential water volume reflects its application of different connections growth rates. Table 8 refers.

Table 8: Non-residential water volume (ML)

Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Non-residential l/c/d					
Moreton Bay	1,176	1,176	1,176	1,176	1,176
Sunshine Coast	1,311	1,312	1,312	1,312	1,312
Non-residential volume (ML)					
Moreton Bay	3,623	3,736	3,761	3,825	3,829
Sunshine Coast	5,964	6,095	6,129	6,236	6,244
Total	**9,587**	**9,831**	**9,890**	**10,061**	**10,073**

Source: Unitywater (2013), QCA calculations.

3.2.3 Non-revenue water (losses)

Unitywater's estimate of non-revenue water encompasses network losses, unbilled water and theft. For 2012-13, this is estimated to be around 10.5% of total water purchased in Moreton Bay and 11.5% in the Sunshine Coast.

Supporting information and historical data showed that in Moreton Bay losses range from 7.3% to 12.1% on a quarterly basis, with a loss factor of 10% over the period. If the period of the floods in early 2011 is excluded, the average loss factor is 10.3%. For the Sunshine Coast, historical data on losses averaged 12.2%. If the flood period is excluded, losses are 11.4%.

Going forward, Unitywater has embarked on a program which aims to quantify and classify the non-revenue water component of its water balance. This project will benchmark Unitywater's non-revenue water against that of other water businesses and to identify opportunities to reduce losses.

Unitywater expects a loss reduction of 3.8% per year for Moreton Bay and 4.6% for the Sunshine Coast such that by 2021, the loss factor of 7.4% would apply for Moreton Bay and 7.6% for the Sunshine Coast.

Given the above, the QCA accepts Unitywater's loss factors and applied these to estimate non-revenue water volume.

Table 9: Non-revenue water (ML)

Council	***2012-13***	***2013-14***		***2014-15***	
		Unitywater	***QCA***	***Unitywater***	***QCA***
Total water demand[(1)] (ML)					
Moreton Bay	25,894	27,388	26,553	28,832	27,019
Sunshine Coast	26,983	28,415	27,642	29,895	28,199
Total	**52,877**	**55,803**	**54,195**	**58,728**	**55,217**
Loss factors					
Moreton Bay	10.5%	9.9%	9.9%	9.5%	9.5%
Sunshine Coast	11.5%	10.7%	10.7%	10.2%	10.2%
Non-revenue water volume (ML)					
Moreton Bay	3,061	3,016	2,920	3,042	2,847
Sunshine Coast	3,512	3,419	3,321	3,415	3,216
Total	**6,573**	**6,436**	**6,241**	**6,457**	**6,063**

Note: [(1)] includes demand for dialysis and fire service that has not been included in the demand by residential and non-residential customers. Source: Unitywater URB (2013), QCA calculations.

3.2.4 Bulk water

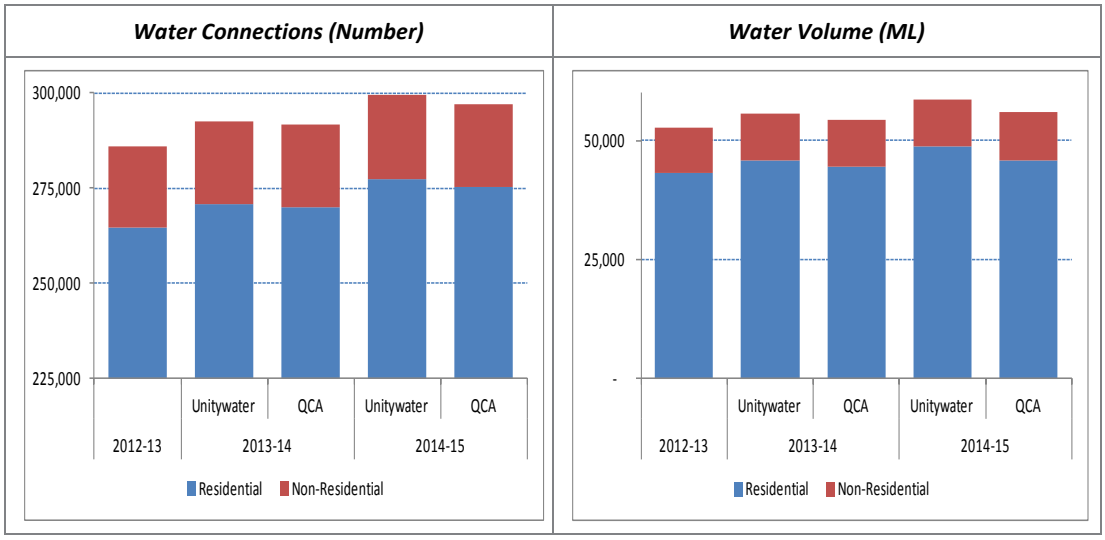
Bulk water is the sum of residential, non-residential and non-revenue water. The QCA's forecasts of bulk water are lower than Unitywater's, arising from the QCA's lower connection growth rates and average consumption rates.

Table 10: Bulk water

Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Moreton Bay	28,956	30,405	29,473	31,874	29,866
Sunshine Coast	30,495	31,834	30,963	33,310	31,414
Total	**59,451**	**62,239**	**60,437**	**65,184**	**61,280**

Note: [(1)] includes demand for dialysis and fire service requirement that has not been included in the demand by residential and non-residential customers. Source: Unitywater URB (2013), QCA calculations.

Figure 3: Water Forecasts



Source: Unitywater URB (2013), QCA calculations.

3.3 Sewerage

3.3.1 Residential

Connections

Unitywater applied OESR medium growth rates to forecast residential sewerage connections using the same approach as for water connections.

As for water, the QCA has applied growth rates that are consistent with the OESR's low population series.

Table 11: Residential Sewerage Connections

Council	*2012-13*	*2013-14*				*2014-15*			
		Unitywater		*QCA*		*Unitywater*		*QCA*	
		#	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*
Moreton Bay	123,363	126,149	2.26%	125,777	1.96%	125,777	2.39%	128,077	1.83%
Sunshine Coast	125,678	128,548	2.28%	128,257	2.05%	128,257	2.30%	130,655	1.87%
Total	**249,041**	**254,696**	**2.27%**	**254,035**	**2.01%**	**254,035**	**2.35%**	**258,732**	**1.85%**

Note: Growth rate based on average annual connections. Source: Unitywater URB (2013), OESR (2011), QCA calculations.

3.3.2 Non-residential

Forecast Methodology

Unitywater forecast non-residential sewage volumes for the Sunshine Coast by applying discharge factors, which vary by the type of water customers, to water use.

Connections

Unitywater applied medium OESR growth rates to forecast non-residential sewerage connections using the same approach as for water connections.

As for water, the QCA has applied OESR low growth rates, resulting in lower connections.

Table 12: Non-residential sewerage connections

Council	*2012-13*	*2013-14*				*2014-15*			
		Unitywater		*QCA*		*Unitywater*		*QCA*	
		#	*Growth Rate*[(1)]	*#*	*Growth Rate*	*#*	*Growth Rate*	*#*	*Growth Rate*
Moreton Bay	5,813	6,005	3.32%	5,988	3.02%	6,149	2.39%	6,097	1.83%
Sunshine Coast	6,526	6,700	2.67%	6,685	2.44%	6,854	2.30%	6,810	1.87%
Total	**12,338**	**12,706**	**2.98%**	**12,673**	**2.71%**	**13,004**	**2.35%**	**12,907**	**1.85%**

Note: Growth rate based on average annual connections. Source: Unitywater URB (2013), OESR (2011), QCA calculations.

Volume

Unitywater applied a set of discharge factors to water use to estimate the deemed volume of sewage disposal for 2012-13 in the Sunshine Coast. Unitywater does not charge for non-residential sewage volumes in Moreton Bay.

Table 13: Non-residential sewage discharge factors

Discharge Factor	*Description*
0%	Fountain, nature strip, planter box, round-about, vacant land, extractive (mining), agricultural business.
25%	Ready mixed concrete depot, concrete batching plant, football oval, golf course, plant nursery, quarry, racing tracks, recreation reserve, cemetery, construction site, bowling green, animals special - boarding kennel beekeeping, parks and gardens, sporting field, farms.
50%	Ambulance, bus/tram depot, car sales, caravan park, caravan/boat parking lot, child care, fire brigade, kennels, kindergartens, machinery storage, school, SES, yacht club, depot (private enterprise).
75%	Tourist attraction/resort, school/training institute (private), clubs/community organisations (non-profit), airport, tennis clubs (non-profit), tennis courts for hire, club-licensed, factory, service station, public toilets.
90%	All other non-residential customers.

Source: Unitywater (2013).

For 2013-15, Unitywater assumed no growth in average non-residential sewage disposal, consistent with its no growth assumption for non-residential water use.

The QCA has accepted this assumption. The QCA has a slightly lower estimate of deemed sewage volume due to its lower non-residential connections.

Table 14: Non-residential sewage discharge volume

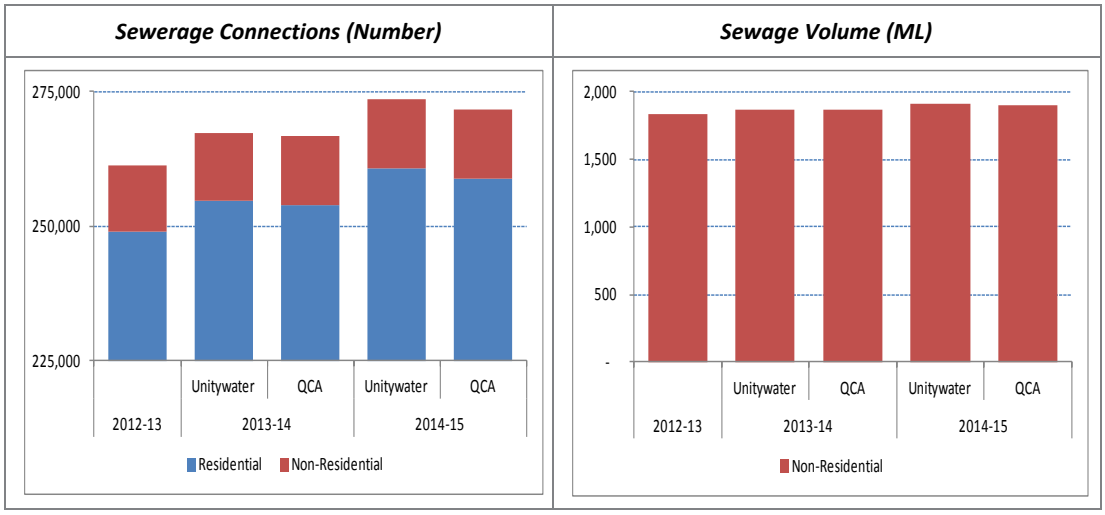
Council	*2012-13*	*2013-14*		*2014-15*	
		Unitywater	*QCA*	*Unitywater*	*QCA*
Non-residential Sewage Volume (ML)					
Moreton Bay*	0	0	0	0	0
Sunshine Coast	1,831	1,867	1,862	1,910	1,897
Total	**1,831**	**1,867**	**1,862**	**1,910**	**1,897**

** Not relevant for Moreton Bay as no volumetric charge for non-residential sewage. Non-residential sewage discharge volume in the Sunshine Coast is determined by applying discharge factor as per Table 13 on non-residential water use. Source: Unitywater (2013), QCA calculations.*

3.3.3 Sewerage Forecasts

Figure 4 compares Unitywater and the QCA's forecasts for sewerage.

Figure 4: Sewerage forecasts



Source: Unitywater (2013), QCA calculations.

3.4 Demand for Capital Planning

Unitywater's Submission

Unitywater's longer term demand projections are derived by multiplying future population estimates by assumed levels of average consumption. Population projections are prepared using geographic land parcel based models, which assign the population to land parcels based on land use planning information[7].

Unitywater's population models disaggregate the projections into low density (detached dwellings) and high density (unit development) residential populations to allow different per capita consumptions to be applied to people living in different dwelling types. Unitywater also disaggregated non-residential demand estimates into various categories of non-residential land use, such as industry, commercial, retail, open space.

For average consumption, Unitywater noted that the current Level of Service (LOS) objectives adopted by the State Government for the supply of water to SEQ include the requirement of 230 l/p/d for residential customers. Taking into account uncertainty over future consumption, it adopted planning assumptions of 230 l/p/d for low and medium density development, and 200 l/p/d for high density development.

Unitywater also applied an allowance for non-revenue water which it projected to decline with its implementation of leakage control measures.

For water and sewerage, Unitywater's demand factors are derived from the SEQ Water Supply and Sewerage Design and Construction Code (Design and Construction Code), which also includes modifications to suit the specific geographical and climatic conditions of SEQ.

QCA's Analysis

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

[7] This information includes: zoning, development densities, developable land, anticipated timing of development, previous development applications, future occupancy ratios, etc.

3.5 Summary

Given available information, Unitywater's methodology to forecast demand for 2013-15 is reasonable. Nevertheless, the QCA has made some adjustments to reflect its view of lower connections growth and average consumption. The QCA's estimates broadly confirm Unitywater's estimates, although the differences increase in 2014-15. For example, the QCA's bulk water estimate in 2013-14 is 2.8% lower than Unitywater's, the difference increases to 5.8% in 2014-15.

4 CAPITAL COSTS

4.1 Introduction

The costs of providing water and wastewater 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 Unitywater's RAB based on the 1 July 2012 RAB as verified by the QCA. The Direction also states that a revaluation of the initial RAB is not to be considered.

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 as at 1 July 2008

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

For 2013-15, Unitywater has adopted a starting RAB as at 1 July 2010 of $2,416.697 million. Unitywater advised that as it commenced operation in 1 July 2010, its internal models adopt a starting RAB as at 1 July 2010. Unitywater advised that the 1 July 2008 RAB and capital expenditure for 2008-09 and 2009-10 are not relevant to its internal modelling because Unitywater did not exist. However, Unitywater stated in its written submission that its 1 July 2010 RAB is based on the initial 1 July 2008 RAB.

As in previous years, Mr Koerner and Ms West submitted that the QCA is not authorised to independently review the initial RAB under the Direction. They submitted that the QCA is unable to identify monopoly pricing abuse or provide transparent information to customers.

Under the Ministerial Direction, the QCA is required to adopt the initial 1 July 2008 RAB. The QCA signalled its intention to roll forward the RAB from 1 July 2008 to Unitywater (and QUU) in March 2013 in consultation on the Information Requirements for 2013-15. To do otherwise would be a revaluation of the initial RAB.

The QCA has therefore adopted a 1 July 2008 RAB based on the information in Unitywater's submission to the 2012-13 price monitoring review. These values reconcile to the Minister's advised values and were accepted by the QCA in its previous reviews.

Table 15 Unitywater RAB as at 1 July 2008 ($m)*

Council	*Water*	*Wastewater*	*RAB*
Moreton Bay	509.75	599.86	1,109.61
Sunshine Coast	369.06	550.64	919.69
Total	**878.81**	**1,150.50**	**2,029.31**

** Excludes non-regulated assets of $0.6 million. Source: Unitywater (2012).*

4.4 Capital expenditure in 2008-10

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

(a) actual capital expenditure for water and wastewater (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 and

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

As noted above, Unitywater stated that the 1 July 2008 RAB and capital expenditure for 2008-09 and 2009-10 are not relevant to its internal modelling. Capital expenditure for 2008-09 and 2009-10 were not provided in the Unitywater submission for 2013-15.

To roll forward the 1 July 2008 RAB the QCA has adopted the capital expenditure for 2008-10 as submitted by Unitywater in previous reviews, as shown in the table below.

Table 16 Capital expenditure 2008-10 ($m)

	2008-09	*2009-10*
Councils	129.60	303.33

Source: Unitywater (2013b).

4.5 Capital expenditure in 2010-13

Under the Ministerial Directions for 2010-13, capital expenditure from 1 July 2010 to 30 June 2013 was accepted if it was considered prudent and efficient by the QCA.

The QCA requires capital expenditure to be included in the RAB only when it is commissioned, and contributes to the provision of water and wastewater services.

Unitywater capital expenditure

In its original submission, Unitywater provided aggregate capital expenditure from 1 July 2010, however this was not disaggregated by service and asset class. This level of disaggregation is required to allow the QCA to adjust capital expenditure, calculate depreciation and the MAR.

Subsequent to its original submission, Unitywater advised it had inadvertently double-counted some capital expenditure in 2010-11 and 2011-12.

Unitywater provided revised capital expenditure data, which it based on audited data. This information was provided by service and asset class. Unitywater submitted that the QCA should adopt the revised capital expenditure data as the basis for its review, as this would lead to a more appropriate calculation of the MAR.

Table 17 Unitywater capital expenditure 2010-13 ($m)

	2010-11	*2011-12*	*2012-13*
Unitywater	181.44	281.94	212.05

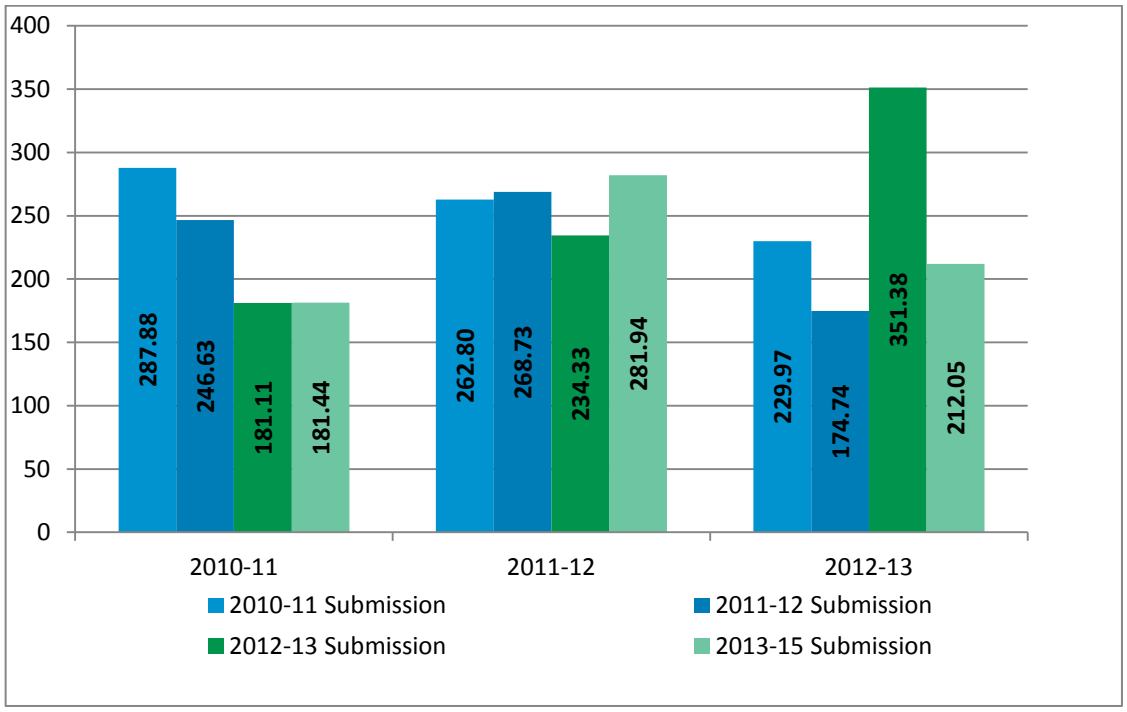
Note: Capital expenditure as-commissioned. Source: Unitywater (2013b).

The QCA has based its review on Unitywater's revised capital expenditure data, on the basis that this will lead to a more appropriate calculation of the MAR. The QCA allocated asset values to services and asset classes in some instances, where this was not readily available from the Unitywater data. [8]

The QCA is willing to work with Unitywater to reconcile the capital expenditure and other data underpinning the RAB and the MAR.

The QCA has reflected Unitywater's capital expenditure in 2010-13 ($675.4 million), noting this is below that previously submitted by Unitywater ($766.82 million in its 2012-13 submission), as set out in Figure 5 below.

Figure 5 Capital expenditure estimates in submissions ($m)



Note: Capital expenditure as-commissioned. Source: Unitywater (2010), Unitywater (2011), Unitywater (2012), Unitywater (2013b).

[8] Unitywater was able to identify commissioned assets for 2010-13, and allocate these by service and asset class in most instances. Unitywater made assumptions to provide forecasts of commissioned assets for 2013-15. The QCA has based its review on this information and populated the data template to reconcile with Unitywater in aggregate.

4.6 Capital expenditure in 2013-2015

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.

Unitywater's forecast capital expenditure for 2013-15

Forecast capital expenditure for the review period by service and driver are shown below (Table 17 and Table 18).

Table 18 Unitywater capital expenditure 2013-2015 by service ($m)

Capex	*2013-14*	*2014-15*	*Total*
Water	72.01	44.69	116.70
Sewerage	100.78	127.32	228.10
Total	**172.79**	**172.01**	**344.80**

Note: Excludes contributed assets and non-regulated assets. Source: Unitywater (2013c).

Table 19 Unitywater capital expenditure 2013-2015 by driver ($m)

Capex driver	*2013-14*	*2014-15*	*Total*
Growth	34.96	98.46	133.43
Renewal	55.35	7.03	62.38
Improvement	44.95	35.46	80.41
Compliance	37.53	31.05	68.58
Total	**172.79**	**172.01**	**344.80**

Source: Unitywater (2013c).

Unitywater attributed the significant capital expenditure for sewerage services to:

(a) major upgrades of some sewage treatment plants (STPs) over the next few years

(b) reconfiguration of STP design and functionality to meet environmental licence[9] conditions

[9] Environmental licences are regulated by the Department of Environment and Heritage Protection (DEHP).

(c) deferral of investment in water distribution infrastructure due to falling levels of residential and business water consumption.

QCA's approach

The QCA considered the prudency and efficiency of Unitywater's forecast capital expenditure for 2013-15 in accordance with the Ministerial Direction.

The QCA's assessment focussed 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.

SKM's Final Report provides 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.

SKM reviewed the compliance of the sampled projects against Unitywater'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 MARs for these years.

The sample of Unitywater projects reviewed in detail is shown in Table 20 below. SKM reviewed the capital expenditure on an as-incurred basis, as this reveals the annual expenditure stream over the life of the project.

Table 20 Unitywater capital expenditure projects reviewed ($m)

Project	*Driver*	*Commissioned in 2013-15*	*As Incurred in 2013-15*
1. SCADA Improvement and Integration Program	Compliance	20.08	16.14
2. Maleny STP Upgrade	Compliance	14.23	11.45
3. Fleet - Trucks	Improvement	8.74	8.74
4. Suncoast Sewerage Scheme Transfer System	Growth	7.01	5.76
5. Coolum STP Inlet Works	Growth	6.60	5.52
6. Northern Service Centre Construction	Improvement	4.83	3.97
Total sampled expenditure		**61.49**	**51.60**

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. Source: Unitywater (2013b).

4.7 Prudency and efficiency of sampled projects

4.7.1 SCADA Improvement and Integration Program

Background

Soon after the formation of Unitywater, the SCADA Upgrade Program was consolidated across Unitywater's north and south regions into one program of four sub-projects, with a revised organisational structure under a single program manager. The four sub-projects are:

(a) SCADA Improvement and Integration Program

(b) switchboard replacement

(c) instrumentation replacement

(d) communications infrastructure program.

In its 2012-13 review, the QCA reviewed the communications infrastructure program and found it to be prudent and efficient (QCA 2013a).

The SCADA Improvement and Integration Program involves replacing all 11 legacy SCADA systems with two systems (North and South) within one single platform. All remote telemetry units (RTUs) are to be replaced and site enabling works to allow for a common control platform.

Through having a common and robust SCADA system, Unitywater expects a reduction in licence costs of approximately $173,000 per year.

Unitywater submitted that the expenditure (as-incurred) on the project would be $16.14 million in 2013-15. A further $7.35 million was incurred in 2012-13; total capital expenditure incurred will be $23.49 million. Unitywater submitted that $20.08m will be commissioned in 2013-15.[10]

Prudency

Unitywater identified compliance and improvement as the drivers of the project.

[10] The QCA notes the as-commissioned expenditure on this project is below the as-incurred expenditure - this has not been explained by Unitywater.

SKM was satisfied that the program will result in a consistent platform for the operation of the SCADA network across Unitywater's service area and should result in long term business efficiency.

SKM found the project to be prudent.

Efficiency

SKM considered that historically the project had not been delivered efficiently as it appeared to have been subject to a number of changes that caused issues around timing and costs. However, SKM stated that the consolidation of the two original contract agreements into an integrated contract was appropriate.

SKM estimated the value of remaining work for the project to be $1.11 million less than Unitywater's most recent cost estimate for the project (all works are forecast to be complete in August 2014). However, as the SKM estimate was higher than the value originally submitted by Unitywater in its data template, SKM recommended that the lower Unitywater value be retained.

Therefore, SKM found the project to be efficient.

In response to SKM's final report (SKM 2013b), Unitywater challenged SKM's views regarding: (i) the scope of outstanding work; (ii) the cost capture of Unitywater's project management costs; and (iii) contingency reduction. Accordingly, Unitywater rejected the $1.11 million reduction in forecast cost as estimated by SKM.

As SKM did not recommend a reduction in the capital budget for the project (on the basis that SKM's estimate of costs was higher than the value in Unitywater's data template), the QCA has not amended the capital budget for this Draft Report.

Policies and procedures

SKM found that the documentation reviewed for this project - including a project brief, Asset Steering Committee (ASC) minutes, Capital Works Committee project decision paper and monthly reports - was generally in line with Unitywater's capital delivery processes.

SKM further stated that there may have been deficiencies in project processes inherited from councils, and that Unitywater had revisited the market where required in order to improve the efficiency of the project delivery.

Conclusion

On the basis of SKM's advice, the QCA accepts that the project is prudent and efficient, as reflected in Table 21 below.

Table 21 SCADA Improvement and Integration Program

	2012-13	***2013-14***	***2014-15***	***Total***
Unitywater Proposed	7.35	12.57	3.57	23.49
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	7.35	12.57	3.57	23.49

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

4.7.2 Maleny STP Upgrade

Background

The Maleny STP services the Maleny community in the Sunshine Coast hinterland and is located east of the town centre, beside Obi Obi Creek. The existing treatment plant has been in operation since 1982 and is at its hydraulic capacity. Under the current load, the STP fails to comply with a number of aspects of its environmental licence requirements.

The existing plant has a maximum design capacity of 2,000 EP. The planned upgrade will have a maximum design capacity of 5,000 EP, catering for growth in the area up until 2031.

The Maleny STP is being replaced with a Membrane Biological Reactor process. As part of the upgrade, Unitywater will be developing a reforestation and wetlands area. Treated water from the Maleny STP will receive additional treatment through the forest and wetland system before entering Obi Obi Creek. Unitywater expect the project will have a positive impact on the health and water quality of Obi Obi Creek.

Unitywater submitted that the expenditure (as-incurred) on the project would be $11.45 million in 2013-15. A further $4.67 million was incurred in 2012-13; total capital expenditure incurred to 30 June 2015 will be $16.12 million.[11] Unitywater submitted that expenditure of $14.23 million will be commissioned in 2013-15.

Prudency

Unitywater identified compliance as the primary cost driver for this project. Drivers of growth, renewals and improvement are also relevant.

As the Maleny STP requires upgrade to meet current and future population projections, SKM found the project to be prudent.

Efficiency

Based on the tender process selected for both the wetlands and treatment plant components of the project, and the negotiation and assessment undertaken, SKM found that the project costs for these were in line with market conditions. SKM found the project to be efficient.

Policies and procedures

SKM found that the documentation reviewed for this project - including the Project Needs Analysis, Major Business Case, Contract Recommendation and Approval Report - were in line with Unitywater's Capital Works Planning Manual (CWPM). This project demonstrated no systemic deficiencies in Unitywater'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 22 below.

[11] Unitywater submitted the completion date for the project as May 2014 but is budgeting further expenditure of $195,000 in 2015-16. This has not been explained by Unitywater.

Table 22 Maleny STP Upgrade ($m)

	2012-13	*2013-14*	*2014-15*	*Total*
Unitywater Proposed	4.67	10.78	0.68	16.12
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	4.67	10.78	0.68	16.12

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

4.7.3 Fleet - Trucks

Background

Unitywater's Plant and Fleet asset base was established from assets identified by MBRC and SCRC as being used by their respective water businesses. Unitywater's Plant and Fleet asset holdings in July 2010 (time of transfer from councils) and July 2013 are summarised in Table 23 below.

Table 23 Unitywater Plant and Fleet

	Passenger vehicles	*Utilities*	*Trucks*	*Heavy Plant*
July 2010	69	275	98	156
June 2013	44	252	93	138

Source: Unitywater supporting information (July 2013).

Unitywater's Plant and Fleet Asset Replacement Program will replace plant and fleet assets that have passed the end of their lease agreement or have passed their optimal replacement points. Based on the current maximum life replacement triggers, SKM accepted the proposed replacement of 23 trucks in 2013-14 and 16 trucks in 2014-15. SKM also accepted the inclusion of an additional seven trucks carried over from 2012-13 in the 2013-14 replacement program.

The replacement program reduces the operational expenditure for the Plant and Fleet section through better management of the fleet, and a reduction of the lease payments for leased assets (from $1.5 million at the time of the asset transfer from SCRC to zero over the five years of the proposed budget plan).

Unitywater submitted that the expenditure (as-incurred) on the project would be $8.74 million in 2013-15. A further $0.76 million was incurred in 2012-13; total capital expenditure incurred to 30 June 2015 will be $9.50 million.[12] Unitywater submitted that expenditure of $8.74 million will be commissioned in 2013-15.

Prudency

SKM concluded that the primary driver for this project - renewal - was demonstrated as the fleet function is vital to Unitywater's ability to achieve business objectives in meeting the needs of its customers.

Efficiency

Based on the replacement of 30 trucks in 2013-14 and 16 trucks in 2014-15, SKM recommended that the QCA accept $5.32 million and $2.88 million for 2013-14 and 2014-15 respectively. SKM recommended a (net) reduction of $0.52 million (an increase of $0.48 million in 2013-14 and a

[12] Unitywater is budgeting further expenditure of $4.86m from 2015-16 to 2017-18.

reduction of $1.00 million in 2014-15) as the costs do not align to the number of trucks and the unit rate for these vehicles. Overall, the project was found to be partially efficient.

Policies and procedures

SKM found that the documentation reviewed for this project - including the Major Business Case, Plant and Fleet Asset Procurement Form - were in line with Unitywater's capital delivery processes. No Contract Recommendation and Approval Report was provided; SKM stated that if completed correctly, this document may have assisted to further demonstrate the efficiency of the project.

Conclusion

On the basis of SKM's advice, the QCA accepts that the project is prudent and partially efficient, as reflected in Table 24 below. SKM advised that the savings from this project should not be extrapolated to other (non-sampled) projects, as the issue was not systemic.

Table 24 Fleet - Trucks ($m)

	2012-13	*2013-14*	*2014-15*	*Total*
Unitywater Proposed	0.76	4.86	3.88	9.50
SKM Adjustment	0.00	0.48	-1.00	-0.52
QCA Recommended	0.76	5.32	2.88	8.98

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

4.7.4 Suncoast Sewerage Scheme Transfer System

Background

The Suncoast STP is located on Finland Road, Pacific Paradise, on the western side of the Sunshine Motorway. The STP catchment includes central Marcoola through Twin Waters, also including Pacific Paradise, Mudjimba, and the airport and industrial estate. Treated effluent from the plant is discharged to the Maroochy River.[13]

The Suncoast STP has a nominal hydraulic and biological capacity to serve 12,000 EP. Current population figures estimate that the Suncoast catchment contributes 15,000 EP to the STP. Further, the Suncoast STP has failed to comply with aspects of its environmental licence conditions and Unitywater is required to undertake corrective action:

(a) In December 2010, the environmental regulator (the then Department of Environment and Resource Management (DERM)) wrote to Unitywater regarding its concerns over the operations of Unitywater's Sunshine Coast STPs.

(b) Unitywater responded to this letter in January 2011, outlining its plan to address these issues.[14]

Unitywater is planning the closure of the Suncoast STP and the transfer of flows to the Maroochydore STP. The Suncoast STP Sewerage Transfer System will transfer the sewerage collected in the Suncoast catchment to the Maroochydore STP for treatment. The project

[13] The Suncoast STP is one of four Unitywater STPs discharging into the Maroochy River: the others are Coolum STP, Nambour STP and Maroochydore STP (Unitywater supporting information (2013)).
[14] Unitywater supporting information (2013).

involves transfer of all Suncoast STP flows via a new transfer pumping station to Maroochydore STP via a 6.1km pipeline under the Maroochy River.[15]

Unitywater expects the project will (among other things):

(a) mitigate potential for fines and/or litigation from DEHP

(b) reduce the number, and operating costs, of treatment plants

(c) increase treatment capacity, which can support a larger customer base that will provide increased annual sewerage charges revenue

(d) reduce the total nutrient load on the Maroochy River.

Unitywater submitted that the expenditure (as-incurred) on the project would be $5.76 million in 2013-15. A further $3.74 million was incurred in 2012-13; total capital expenditure incurred to 30 June 2015 will be $9.50 million. Unitywater submitted that expenditure of $7.01 million will be commissioned in 2013-15.

Prudency

The primary cost drivers identified for this project are compliance and growth. SKM was satisfied the drivers were demonstrated and found the project to be prudent.

Efficiency

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

However, SKM identified a concern that the rising main had been built prior to the finalisation of the design of the pump station and considered that there may have been efficiencies in packaging the pipework north of the river with the pump station.

SKM noted that while design and project management costs for this project are particularly high, the project has a number of particular technical challenges, including a long directional drill under the Maroochy River. SKM's estimated value of the remaining work was higher than the value originally submitted by Unitywater. Accordingly, SKM suggested that the lower number be adopted until the variation can be resolved [by Unitywater].

In response to SKM's final report (SKM 2013b), Unitywater stated that it did not agree with SKM's view that there may have been efficiencies by packaging pipe work north of the Maroochy River with the pump station.[16] Specifically, Unitywater advised that it chose to separate the contracts on the basis of complexity and the proposed timing of works. Accordingly, Unitywater rejected SKM's amendments to the capital budget for the project.[17]

As SKM did not recommend a reduction in the capital budget for the project (on the basis that SKM's estimate of costs was higher than Unitywater's data template), the QCA has not amended the capital budget for this draft report.

[15] In its 2012-13 review submission, Unitywater referred to its plan to save $13.0m by diverting sewage from the Suncoast STP by building a pipeline to the Maroochydore STP that would permit temporary decommissioning of the Suncoast STP, rather than upgrading the plant to a more stringent environmental licence (Unitywater 2012).

[16] Refer to SKM (2013b) section B.5.

[17] Response to SKM Final Report – Suncoast Sewage Scheme Transfer System – Unitywater Final Response (Unitywater 2013).

Policies and procedures

SKM found that the documentation reviewed for this project - including the Project Needs Analysis, Major Business Case, Contract Recommendation and Approval Report - were in line with Unitywater's capital delivery processes. This project demonstrated no systemic deficiencies in Unitywater'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 25 below.

Table 25 Suncoast Sewerage Scheme Transfer System ($m)

	2012-13	*2013-14*	*2014-15*	*Total*
Unitywater Proposed	3.74	5.76	0.00	9.50
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	3.74	5.76	0.00	9.50

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

4.7.5 Coolum STP Inlet Works

Background

The Coolum STP is located on Marsh Road, just west of Mt Coolum and the Sunshine Motorway. It services North Marcoola, South Peregian, Coolum Beach, Mt Coolum, Yaroomba Coolum Ridges and Peregian Springs. The Coolum STP was constructed in 1978 - including the current inlet works screening and grit removal facilities - and was last upgraded in 1997.

The existing STP regularly receives flows above the design capacity, resulting in regular non-conformances of the flow limits imposed by the existing environmental licence. Projected growth in the catchment is expected to increase the flow to the STP, increasing the frequency of these non-conformance events.

In February 2012, Unitywater completed the Major Business Case for the Coolum STP upgrade. The modified business case of April 2012 recommended delivery of the project in three stages:

(a) Stage 1 - a demonstration wetland, which is under construction and is a separate project

(b) Stage 2 - new inlet works and bypass facility

(c) Stage 3 - major upgrade and full-scale wetland to be constructed in the future as required.[18]

Stage 2 is the element of the overall project which was selected for review by the QCA. The project also forms part of the program of works outlined to DERM in January 2011 to address operational issues at Unitywater's Sunshine Coast STPs (refer to section 4.7.4 above).[19]

Unitywater submitted that the expenditure (as-incurred) on the project would be $5.52 million in 2013-15. A further $1.20 million was incurred in 2012-13; total capital expenditure incurred to 30 June 2015 will be $6.72 million. Unitywater submitted that expenditure of $6.60 million will be commissioned in 2013-15.

[18] Unitywater supporting information (2013).
[19] Unitywater supporting information (2013).

Prudency

SKM considered that the drivers of compliance and growth were evidenced by the plant being beyond its design capacity and as a result failing to comply with aspects of its license conditions.

SKM found the project to be prudent.

Efficiency

SKM was satisfied that a range of options were adequately selected and reviewed and that the scope of works is appropriate to meet the project need. Further, SKM considered that the standards used for this project are appropriate.

SKM found the project to be efficient.

Policies and procedures

SKM found that the documentation reviewed for this project - including the Project Needs Analysis, Major Business Case, Variation Request and Approval Form, Contract Recommendation and Approval, and Significant Procurement Plan - were in line with Unitywater's capital delivery processes. This project demonstrated no systemic deficiencies in Unitywater'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 26 below.

Table 26 Coolum STP Inlet Works ($m)

	2012-13	*2013-14*	*2014-15*	*Total*
Unitywater Proposed	1.20	5.52	0.00	6.72
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	1.20	5.52	0.00	6.72

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

4.7.6 Northern Service Centre Construction

Background

Prior to the formation of Unitywater, Sunshine Coast Water recognised a need for the consolidation of the water/sewerage field services inherited through the amalgamation of the Noosa, Maroochy and Caloundra councils in 2008.[20]

Unitywater subsequently undertook an independent review of its property portfolio to integrate the business across its operating area, find operating efficiencies and improve customer service. This review informed Unitywater's Accommodation Strategy, part of which involves the development of a Northern Service Centre (NSC) on land owned by Unitywater adjacent to the Maroochydore STP.[21] The development of the NSC will consolidate a number of sites across the northern region of Unitywater's operating area.

[20] Unitywater supporting information (2012).
[21] The Accommodation Strategy was approved in concept by Unitywater's board in August 2011 but was not provided to SKM for review (SKM 2013b).

Staff to service the northern region operate out of a number of sites, of which many are leased from SCRC. This situation is unsustainable as SCRC is not willing to provide the current sites as long term accommodation to Unitywater.[22]

There are two main components to the NSC project - the construction (bulk earthworks, design and construction and building fit-out) and the subsequent subdivision of the land. The construction component was selected for review by the QCA.

Unitywater submitted that the expenditure (as-incurred) on the project would be $3.97 million in 2013-15. Unitywater submitted that expenditure of $4.83m will be commissioned in 2013-15.

Prudency

The identified driver for this project is business efficiency. This is not a driver specifically endorsed by the QCA. The QCA has identified improvement as the relevant driver.

SKM agreed that the consolidation of sites in the northern region is likely to result in improved collocation and integration of work practices and lower operating costs. SKM found the NSC construction project to be prudent.

Efficiency

In terms of operating efficiencies, SKM noted that the benefit of the planned rationalisation of functional support such as logistics, fleet and administration had not been costed by Unitywater or demonstrated to SKM.

However, SKM found that the tender process used for the evaluation and subsequent award of the bulk earthworks contract, and the design and construction contract, was robust and that the costs are in line with market conditions. Accordingly, SKM concluded the capital costs for the construction project were efficient.

Policies and procedures

SKM found that the documentation reviewed for this project - including the Business Case, Contract Recommendation and Approval Report - were in line with Unitywater's capital delivery processes. However, SKM noted that no Project Needs Analysis Report was undertaken but that the Strategic Property Review Report was produced.

Whilst Unitywater's standardised cost estimation process has not been undertaken for this project, SKM noted that this spreadsheet is designed to cover Unitywater's typical works (that is, pumps and pipework) rather than buildings. As such, SKM considered the independent estimates produced to be acceptable.

This project demonstrated no deficiencies in Unitywater'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 27 below.

[22] An email from the CEO of SCRC of 11 October 2011 is referenced in the project's business case. SKM assumed that this email supports Unitywater's point regarding no security of tenure for the council sites; however, this email has not been sighted by SKM or the QCA.

Table 27 Northern Service Centre Construction ($m)

	2012-13	*2013-14*	*2014-15*	*Total*
Unitywater Proposed	0.00	3.97	0.00	3.97
SKM Adjustment	0.00	0.00	0.00	0.00
QCA Recommended	0.00	3.97	0.00	3.97

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

4.8 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 one project, as per Table 28 below. The overall reduction is $0.52 million or 0.75% of the sampled expenditure.[23]

Table 28 Review of Capital Expenditure for 2013-15 ($m)

Project	*SKM Assessment*			*Expenditure**		
	Prudent	*Efficient*	*Comment*	*Uw*	*SKM*	*QCA*
1. SCADA Improvement and Integration Program	Yes	No	SKM estimate of remaining work is higher than submitted by Unitywater; lower number adopted.	23.49	0.00	23.49
2. Maleny STP Upgrade	Yes	Yes	Prudent and efficient.	16.12	0.00	16.12
3. Fleet - Trucks	Yes	No	Recommended reduction in the unit cost for the seven trucks carried over from 2012-13 to 2013-14.	9.50	-0.52	8.98
4. Suncoast Sewerage Scheme Transfer System	Yes	No	SKM estimate of remaining work is higher than submitted by Unitywater; lower number adopted.	9.50	0.00	9.50
5. Coolum STP Inlet Works	Yes	Yes	Prudent and efficient.	6.72	0.00	6.72
6. Northern Service Centre Construction	Yes	Yes	Prudent and efficient.	3.97	0.00	3.97
Total				**69.31**	**-0.52**	**68.79**

*Note: Uw = Unitywater. * Includes expenditure on projects incurred in 2012-13. Source: SKM (2013b). Table may not add due to rounding.*

4.9 Capitalised interest

Unitywater submitted that it capitalised interest on projects that extend beyond 12 months using a cost of debt of 6.37%, consistent with statutory accounting requirements.

[23] Unitywater's commissioning model did not allocate overhead costs to the Fleet - Trucks project for 2013-15. Accordingly, the QCA applied the as-incurred reduction to Unitywater's MAR.

The QCA notes that for regulatory purposes, capital expenditure is assumed to be funded by both debt and equity under the benchmark assumptions in the WACC. Therefore, work in progress should be capitalised at the WACC. The QCA benchmark WACC is 6.57%, whereas Unitywater proposed a WACC of 7.62%.

As the calculation of interest during construction was hard coded, the QCA is unable to adjust for the difference between the debt rate and the WACC. However, the difference is not expected to be material. Unitywater's proposals regarding the WACC are noted further below.

4.10 Policies and procedures

Capital expenditure planning from 2010 to 2013

In previous reviews, the QCA reported on Unitywater's approach to capital planning. Table 29 below summarises the QCA's key findings from its previous reports.

Table 29 Unitywater's capital planning - 2010 to 2013

Year	*QCA's capital planning findings*
2010-11	Unitywater developed a capital prioritisation model to assess and rank proposed capital projects against seven weighted criteria. Unitywater also automatically included projects meeting specific 'triggers' (that is, previously commenced projects, statutory/legislative provisions, and extreme public, workplace health and safety or environmental risks) in the capital expenditure program. Further, Unitywater improved governance arrangements for reviewing and delivering its capital program. Unitywater's expenditure approval processes, and efforts to identify least cost and innovative solutions, reduced capital expenditure programs compared to forecasts based on council budgets for 2010-11 (prepared prior to Unitywater's formation). Following its initial price monitoring submission in August 2010, Unitywater advised the QCA that it expected to defer approximately $50 million of capital expenditure in 2010-11, the majority of which on the basis that Unitywater had more detailed information or understanding of project circumstances from its own investigations.
2011-12	In 2011-12, Unitywater expanded its capital prioritisation process through the introduction of the ASC and the Capital Works Justification Process. Also in 2011-12, Unitywater used a prioritisation model to assess projects across its region; this risk based model evaluated and scored projects against six weighted criteria which aligned with Unitywater's corporate risk assessment methodology.
2012-13	The QCA again highlighted Unitywater's progress on capital planning issues. The QCA also noted Unitywater's participation in the IWA/WSAA 2012 Asset Management Performance Improvement Project (WSAA asset management project). Through this project, Unitywater was found to have relatively strong asset management practices in a number of areas, with asset financial management, quality management, equipment/product design standards and procurement being assessed as well developed.[24] Areas the project identified as being least well developed included: (a) communication of the responsibility for asset management and delivery between various groups, beyond that of process and organisation charts (b) relating asset management and performance to the level of service, the costs associated with that performance and the price to customers (c) identifying risks from assets and placing a dollar value upon the consequences (d) end of economic life and decommissioning.

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

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

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.

Unitywater's capital expenditure program and delivery processes are outlined in its CWPM. The Capital Works Justification Manual documents the process and decision points. The process covers the identification, development, prioritisation and approval phases of a typical capital works project/program.

Unitywater uses risk based prioritisation model allows to assess, score and rank capital projects. Projects are evaluated and scored against weighted criteria which align with Unitywater's corporate risk assessment methodology. These documents are used to form the five year list of capital expenditure works.

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

(a) a standardised approach to cost estimating including whether a summary document had been prepared to facilitate review and reporting

(b) a gateway review process

(c) detailed analysis of options for major projects

(d) only commissioned capital expenditure is included in the RAB

(e) compliance with legislation and corporate plans

(f) consideration of efficiency from a regional perspectives

(g) whether the asset management system is consistent with Publicly Available Specification 55 - Asset Management (PAS-55)[25] or similar

(h) procurement and other delivery processes.

Standardised approach to cost estimating

A Capital Works Estimating Tool is included in the CWPM. Its methodology and guidelines for use are also described in the CWPM's appendices. SKM found this to be in accordance with good industry practice; however, as it was not clearly stated that this was mandatory, the approach was not considered robust.

SKM further observed that it had not seen evidence of this tool being used in any of the capital expenditure projects it reviewed. However, as this tool has been devolved to assist Unitywater to price core business elements (pumps, pipework, fittings etc), SKM was satisfied that its use may not be appropriate for non-core business areas (such as buildings and vehicles).

Gateway review

All proposed capital works infrastructure projects are required to adhere to a robust development and approval process to ensure they meet Unitywater's corporate goals and objectives, and ultimately result in prudent and efficient expenditure. To this end, processes and procedures have been developed to manage the following phases of the capital process:

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

(a) project identification

(b) project justification

(c) prioritisation, optimisation and budget development

(d) budget approval

(e) project delivery.

The purpose of the CWPM[26] is to document the processes associated with items (a) to (d) above and to list and provide details of the numerous sub processes, documents and decision points that form the master process. Processes associated with item (e) above are documented separately in gates 2 to 5 of the network projects process. The manual also includes the various tools, templates and guidelines that are used in Unitywater's capital works development processes.[27]

SKM noted:

(a) the CWPM described a series of decision gates, including the Need Definition and the Business Case, as well as successive approvals up to board level

(b) the major projects gateway process spreadsheet describes that process at Gate 1 (Needs Analysis), Gate 2 (Business Case), Gate 3 (Design and Tendering) Gate 4 (Construction, Commissioning and Handover) and Gate 5 (Close Out).

However, Gate 5 only applies to major projects completed within treatment plants. Therefore, SKM considered that the Unitywater process does not yet fully meet the requirement of a gated review process that is in keeping with good industry practice, as it should apply to all major projects.

Detailed analysis of options for major projects

The CWPM summarises Unitywater's investment appraisal of options process. This describes a financial evaluation based on comparing the net present value of future incremental cash flows, including income and tax effects. Sensitivities are also analysed in order to determine least-cost solutions, optimal investments and value-for-money. SKM noted that the summary in the CWPM describes only a financial comparison of options and does not include a risk (for example, environmental, implementation) comparison of options.

However the business case template requires assessment of a range of project options across relevant areas such as quality, risk, operations, environmental, regulatory and compliance, as well as the financial evaluation. SKM concluded that this is in accordance with good industry practice and is robust.

Commissioned capital expenditure from 1 July 2010 in the RAB

Unitywater's capital expenditure model translates capital expenditure as-incurred to as-commissioned using the WACC. The commissioned value is reflected in the Unitywater data templates which are used by the QCA to roll forward the RAB from 1 July 2010. (As noted above, councils' capital expenditure is used to roll forward the RAB from 1 July 2008 to 1 July 2010. The QCA has used data from previous Unitywater submissions to do so.)

[26] The CWPM applies to water supply and sewerage infrastructure projects and equipment requests specific to Unitywater's Infrastructure Services and Infrastructure Planning and Capital Delivery Divisions.
[27] Unitywater supporting information (2013).

Compliance

SKM's review of key Unitywater documents governing major capital expenditure documents is shown below.

Table 30 Unitywater compliance with legislation

Documents	*SKM Assessment*
Unitywater Code of Conduct Policy Unitywater Corporate Strategic Plan 2013-14 to 2017-18	DR Act and other legislation specifically referenced.
Unitywater Netserv Plan Part A[28] Guide to the Netserv Plan, Rev 2 (June 2012)	Environmental and licence compliance (p 35). Meeting legislative obligations generally (pp 44, 46). DR Act and *Sustainable Planning Act 2009* (Qld) specifically referenced.
Netserv Plan Part B Corporate Services Plan Governance Arrangements, Revision 2 (June 2012)	Legislation referenced included the *Sustainable Planning Act 2009* (Qld), DR Act, *Water Act 2000* (Qld), *Fairer Water Prices for SEQ Amendment Act 2011* (Qld), *Queensland Competition Act 1997* (Qld), *Environmental Protection Act 1994* (Qld), *Water Supply (Safety and Reliability) Act 2008* (Qld), and the SEQ Water Market Rules.[29]
Netserv Plan framework diagram (part of Netserv Plan Part B, May 2012)	State legislation and regulation is shown as driving a Compliance Plan.
Compliance Plan, Revision 2 (4 April 2012)	Describes the global compliance system across legislative requirements and also contractual and internal requirements. It references a "Central Compliance Obligations Register".
Compliance obligations register	Comprehensive register of legislation.
Compliance Checklist Annual Report 2011-12	Requirements are cross-referenced against Annual Report.
Audited financial statements for 2011-12[30]	The audit opinion given on 30 August 2012 and was unqualified. This indicated 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[31].
Capital Works Planning Manual, Revision 6 (5 May 2013)	Legislation referenced included the *Sustainable Planning Act 2009* (Qld), DR Act, *Water Act 2000* (Qld), *Environmental Protection Act 1994* (Qld), and the *Water Supply (Safety and Reliability) Act 2008* (Qld).

Source: SKM (2013b).

SKM considered that Unitywater's capital expenditure policies and procedures met the compliance requirement and were robust.

SKM reported that Unitywater publishes customer service standards covering water supply interruptions, quality, pressure and volume, and customer response. SKM further noted that

[28] The document was a consultation draft and did not have an applicable date or version.
[29] The QCA notes that, on 1 January 2013, the SEQ Water Market Rules ceased to have effect when the Bulk Water Supply Code took effect: *Water Act 2000* (Qld), ss 360P and 1223; Water (Bulk Water Supply Code) Notice 2012 (Qld), s 3.
[30] The 2011-12 financial statements were the most recently available at the time of SKM's assessment.
[31] The Queensland Government introduced a new procurement policy on 1 July 2013 (refer to the Department of Housing and Public Works for more information).

these are largely set by Unitywater, and that these vary between SEQ service providers. They are listed as inputs to Unitywater's CWPM and Netserv Plan Part B.

The QCA notes that Unitywater does not publicly report on these standards[32] and recommends this should occur.

Considers regional perspective

SKM noted that the DR Act requires SEQ service providers to prepare Water Netserv Plans by 1 March 2014.[33] An entity's Water Netserv Plan must indicate how the entity plans to achieve effective outcomes for the provision of water and wastewater 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 found that:

(a) the Netserv Plan Part B does not have provisions to address the regional requirements of the DR Act and therefore does not comply with this requirement

(b) the CWPM does not have explicit provisions to address these regional requirements at key decision points and, therefore, did not comply with this requirement

(c) Unitywater's Treatment Services Strategy, which considers provision of treatment plant services over Unitywater's entire service area, both in the short term and long term, clearly demonstrated consideration of the prudency and the efficiency of expenditure from a regional basis.

Unitywater 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.[34]

The QCA notes that, in its submission, Unitywater stated that its Water Netserv plan been endorsed by the Minister for State Development, Infrastructure and Planning, and endorsed by Unitywater's participating councils (MBRC and SCRC) (Unitywater 2013a).

Also in its submission, Unitywater stated its Capital Works Program takes into consideration:

(a) planning assumptions in the SEQ Regional Plan;

(b) MBRC's and SCRC's planning schemes (under review); and

(c) fulfilling legislative, regulatory, policy and other strategic planning requirements.

[32] Unitywater supporting information (2013).
[33] Section 99BJ.
[34] Logan City Council supporting information (2013).

Unitywater submitted that it takes a whole of region approach to invest in capital projects to deliver services to customers in Moreton Bay and the Sunshine Coast. In addition to addressing the historical under-expenditure on capital (referred to above), Unitywater considers its combined capital works program provides for a smoother combined capital expenditure that permits greater efficiencies in planning, procurement and delivery than would be available to a smaller disaggregated water business.

Continuous improvement is another feature of capital planning emphasised by Unitywater in its submission. Unitywater supports investment in alternative nutrient or pollutant reduction initiatives to achieve lower cost environmental benefits in preference to continual focus on STP licences. Unitywater submitted that the law of diminishing returns applies to STP augmentations particularly when complying with stricter environmental licences; that is, the incremental cost of each additional kilogram of nitrogen removed increases as new technology, processes or additional chemicals and energy are used to remove more nitrogen. Unitywater's STPs contribute approximately 10% of the nitrogen in local river systems - according to Unitywater, a focus and investment in the remaining 90% would achieve greater reductions in nutrients at a lower cost than STP augmentations.[35]

Unitywater has assisted its participating councils to prepare their total water cycle management (TWCM) plans and has carried out agreed activities included in the plans.[36] Unitywater is also investigating innovative ways of managing effluent discharged from its STPs, such as recycling bio-solids for agricultural or industrial use, using more effective techniques for nutrient removal, and creating wetlands to filter treated effluent before it reaches waterways (for example, refer to the Maleny STP Upgrade project in section 4.7.2 above).

Asset management system

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

Unitywater submitted that its asset management systems have been developed in accordance with the framework set out under PAS 55-1:2008.

Although SKM noted Unitywater has asset management projects underway, SKM identified a range of non-compliances of Unitywater's asset management system against the requirements of PAS-55 and found Unitywater's asset management system was not consistent with good industry practice and was not robust.[37]

SKM highlighted that Unitywater has not yet fully implemented its Consolidated Asset Management System (CAMS) which will allow it, amongst other things, to:

(a) more efficiently assess the condition of its properties

(b) prioritise maintenance and

(c) better manage its fleet of heavy and light vehicles and plant and equipment.

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

[35] Unitywater (2013a).

[36] The Environmental Protection (Water) Policy 2009 (Qld) previously required Unitywater's participating councils to prepare TWCM plans by 1 July 2015. MBRC published its TWCM plan in October 2012 (MBRC 2012). SCRC's *Sunshine Coast Waterways and Coastal Management Strategy* proposed the development of a TWCM plan (SCRC 2011).

[37] Refer to SKM (2013b) section 3.3.4.

published standard of requirements for good industry practice. The relative results will therefore vary dependent on the other authorities participating (SKM 2013c).

Procurement

SKM concluded that Unitywater's Procurement and Disposals Policy incorporated good industry practices for the procurement of goods and services and was robust.

Summary of findings on policies and procedures

The QCA notes that SKM found that Unitywater's capital planning policies and procedures were not always consistent with good industry practice. In particular, SKM found that gateway close out reviews should apply to all major projects (not just major projects within treatment plants).

Further, SKM reviewed Unitywater's asset management system against PAS-55 and found areas for improvement, including that Unitywater has not yet fully implemented its CAMS which will allow it, amongst other things, to:

(a) more efficiently assess the condition of its properties

(b) prioritise maintenance and

(c) better manage its fleet of heavy and light vehicles and plant and equipment.

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.

4.11 Summary of adjustments for 2013-15

The QCA's adjustments to Unitywater's capital expenditure for 2013-15 are shown below.

Table 31 Comparison of Unitywater's and QCA's capital expenditure as-commissioned ($m)

	2013-14	***2014-15***
Unitywater's proposed capital expenditure (excluding non-regulated)	172.79	172.01
QCA adjustments to sampled capex	0.48	-1.00
Total capital expenditure	**173.26**	**171.01**

Source: QCA adjustments using Unitywater information template.

4.12 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, wastewater, 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). Unitywater (and QUU) 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.

Unitywater's submission

Unitywater stated that capped infrastructure charges, combined with the removal by the State Government of 40% capital subsidies for STP upgrades, had increased the pressure on utility charges to fund infrastructure to deliver water supply and sewerage charges. Further, the Local Government Tax Equivalents Regime[38] requires that a share of the capital revenue it receives is returned to its participating councils via tax equivalents, reducing the funds available to Unitywater to build infrastructure.

Unitywater has moved from the revenue offset to asset offset approach for capital contributions. Unitywater cited the change in the QCA's regulatory WACC (from 9.35% to 6.57%) as a reason for its decision, noting that it would otherwise be over-recovering and there is no QCA approved mechanism for under and over recoveries.

Unitywater's contributed assets and capital contributions are shown in Table 32 below.

Table 32 Unitywater contributed assets and capital contributions ($m)

	2010-11	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Contributed assets	55.1	39.7	49.9	38.8	40.7
Capital contributions	39.3	32.0	31.7	29.4	30.9
Total	**94.4**	**71.7**	**81.6**	**68.2**	**71.6**

Source: Unitywater (2013c).

QCA analysis

The QCA accepts Unitywater's change to the asset offset approach to the treatment of capital contributions, as provided for 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.[39]

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

The QCA accepts Unitywater'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.

4.13 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.

[38] Refer to the Local Government Tax Equivalents Manual, Queensland Treasury (2010).
[39] Refer to page 63 of SEQ Interim Price Monitoring Framework Final Report, QCA (2010).

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.

Unitywater applied a WACC of 7.62% to calculate the return on capital for 2013-15. Unitywater submitted that its departure from the QCA's benchmark WACC of 6.57% had regard to a range of literature supporting the use of long term estimates of inputs to minimise the variability of WACCs derived for regulatory purposes.

Unitywater has made a submission to the QCA's WACC review; the issues raised including the volatility of WACC over time will be addressed as part of that review.[40]

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.[41] To estimate inflation, the Ministerial Direction requires the QCA to use the annual March to March ABS CPI (all groups, Brisbane).

Unitywater adopted the same estimates to index the RAB from 1 July 2008 as the QCA, except for 2010-11 (Unitywater adopted 3.88%, instead of 3.6% as per the QCA Information Requirements for 2013-15) and 2011-12 (Unitywater adopted 0.9%, instead of 1.3%).[42]

Unitywater's estimate of the return on capital from its 7.62% WACC and its estimate of the RAB is higher than the QCA's estimate based on its benchmark WACC of 6.57% below.

Table 33 Return on capital ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	Uw	**QCA**	**Uw**	**QCA**	**Uw**	**QCA**	**Uw**	**QCA**
Gross return on capital	89.8	76.3	146.4	126.4	92.3	78.2	154.4	132.3
- Indexation	-29.1	-24.4	-48.1	-40.4	-29.9	-25.0	-50.7	-42.3
Return on capital	**60.7**	**52.0**	**98.3**	**86.0**	**62.4**	**53.2**	**103.7**	**90.0**

Note: Uw = Unitywater. Source: Unitywater (2013), QCA calculations.

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.

[40] More information on the QCA WACC review is available at www.qca.org.au/cross-industry/CostofCapitalReview1213/.

[41] 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).

[42] 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.

Unitywater's submission

Unitywater provided a RAB roll-forward from 1 July 2010. Under the asset offset approach adopted by Unitywater from 1 July 2013, contributed assets and capital contributions are excluded from the RAB from that date.

Unitywater provided a RAB roll-forward that included non-regulated assets and disaggregated by water, sewerage and establishment costs. The Unitywater total roll forward is set out below.

Unitywater submitted that the QCA should adopt its estimate of depreciation, as Unitywater's value is based on audited data, whereas the QCA estimate is based on asset classes and average asset lives.

Table 34 Unitywater asset base roll forward ($m)

	2010-11	***2011-12***	***2012-13***	***2013-14***	***2014-15***
Opening RAB	2,416.697	2,609.557	2,836.205	3,025.747	3,165.929
Capex	181.441	281.879	211.963	175.890	174.216
Depreciation	(83.353)	(79.451)	(82.157)	(83.513)	(84.743)
Disposals	(1.729)	(1.136)	(2.582)	-	-
Capital contributions				(29.413)	(30.856)
Closing RAB	**2,609.557**	**2,836.205**	**3,025.747**	**3,165.929**	**3,305.159**

Source: Unitywater (2013c).

QCA analysis

As noted above, the QCA adopted the 1 July 2008 RAB and 2008-10 data from Unitywater's previous submission.

The QCA investigated whether asset lives could be backsolved from Unitywater data. However, the backsolved asset lives varied from year to year and could not be explained by the (relatively small) value of additions to opening asset values.

The QCA adopted asset lives based on the values in previous Unitywater submissions. The QCA applied straight-line depreciation and recognised the asset offset approach from 1 July 2013 in its RAB roll-forward. The QCA will work with Unitywater to reconcile differences in the RAB for the Final Report.

The QCA adopted slightly different indexation to Unitywater in 2010-11 and 2011-12 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 higher than Unitywater's, this may be partly due to the use of a higher index in 2011-12.

Table 35 QCA asset base roll forward - water ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	878.81	935.14	998.65	1,060.45	1,090.99	1,133.74	1,175.38
Capex	71.73	78.09	62.61	56.78	63.38	72.49	43.69
Indexation	18.25	31.02	37.08	14.15	23.57	24.39	24.97
Depreciation	-29.69	-33.31	-37.33	-39.90	-43.15	-38.47	-32.44
Disposals	-3.96	-12.30	-0.55	-0.49	-1.05	-1.37	0.00
Capital Contributions	-	-	-	-	-	-15.40	-16.16
Closing RAB	**935.14**	**998.65**	**1,060.45**	**1,090.99**	**1,133.74**	**1,175.38**	**1,195.44**

Source: QCA calculations.

Table 36 QCA asset base roll forward - sewerage ($m)

	2008-09	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
Opening RAB	1,150.50	1,193.60	1,422.45	1,549.89	1,748.22	1,879.88	1,955.91
Capex	57.70	225.13	118.85	225.15	148.67	100.78	127.32
Indexation	23.52	41.67	53.33	21.61	38.26	40.39	42.26
Depreciation	-31.39	-36.71	-43.56	-47.79	-53.74	-51.12	-47.33
Disposals	-6.73	-1.23	-1.18	-0.64	-1.53	0.00	0.00
Capital Contributions	-	-	-	-	-	-14.01	-14.70
Closing RAB	**1,193.60**	**1,422.45**	**1,549.89**	**1,748.22**	**1,879.88**	**1,955.91**	**2,063.47**

Source: QCA calculations.

4.15 Capital costs

A comparison of Unitywater and QCA capital costs is provided in Table 37 below.

Table 37 Comparison of Unitywater and QCA Capital Costs ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	Uw	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*
Return on capital	60.7	52.0	98.3	86.0	62.4	53.2	103.7	90.0
Return of capital	31.9	38.5	51.6	51.1	31.7	32.4	53.1	47.3
Capital costs	**92.6**	**90.4**	**149.9**	**137.1**	**94.0**	**85.6**	**156.8**	**137.3**

Note: Uw = Unitywater.

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 Unitywater'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 Unitywater'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 Unitywater'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.

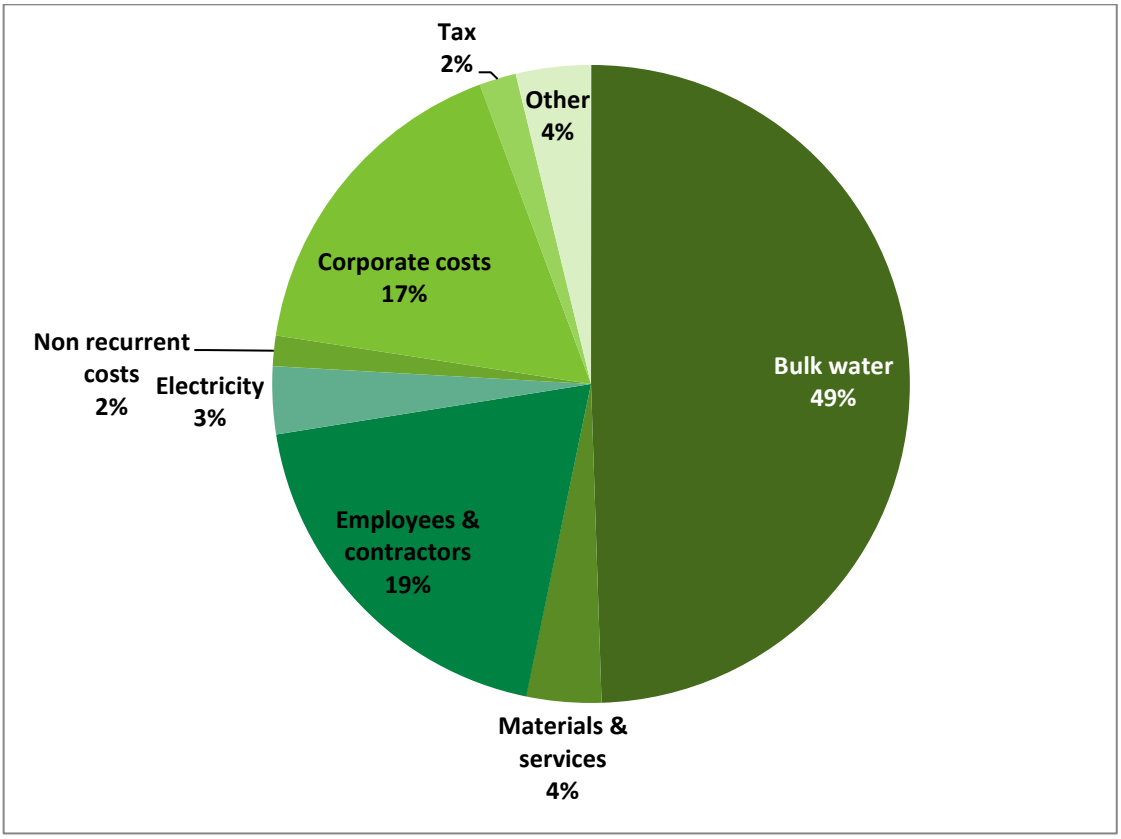
The QCA appointed SKM to assist in its assessment of operating and capital expenditure.

SKM's Final Report reviews Unitywater's 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

Unitywater has submitted operating costs of $285 million in 2013-14 and $309 million in 2014-15. Almost half of Unitywater's forecast operating costs over the 2013-15 period is the cost of purchasing bulk water from Seqwater (Figure 6).

Figure 6 Unitywater's forecast operating costs 2013-15 ($m)



Source: Unitywater (2013b).

Unitywater (2013a) submitted that its operating cost budget considers factors such as growth in demand and connections, asset maintenance requirements and compliance obligations. Table 38 shows Unitywater's detailed operating cost forecast.

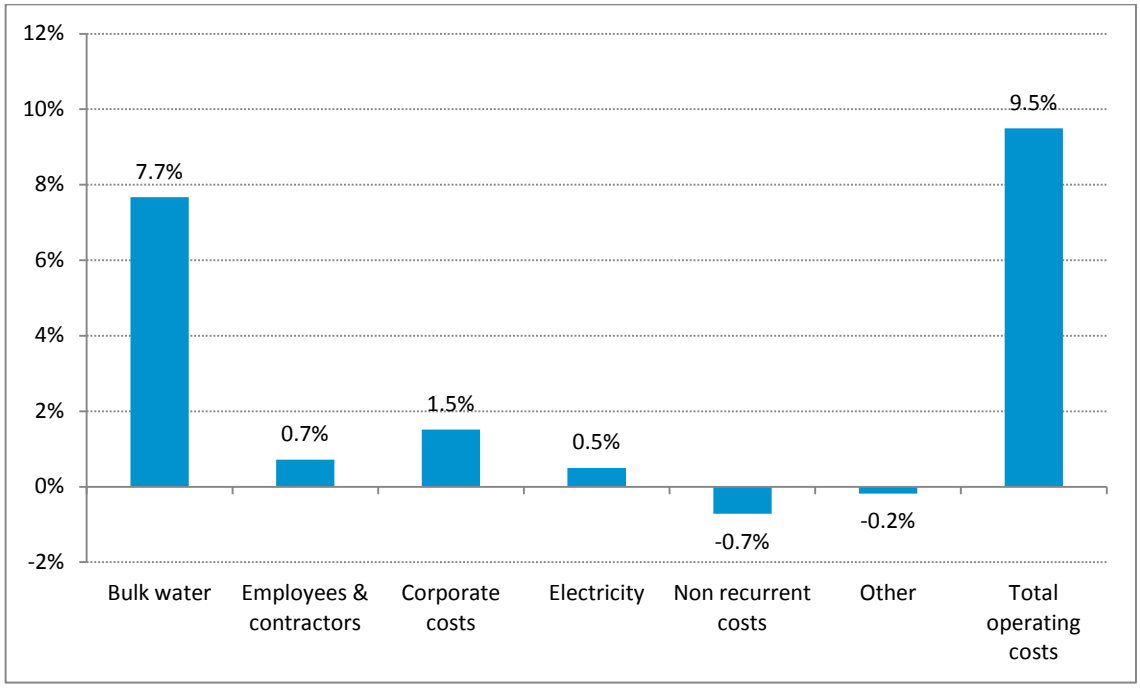
Table 38 Unitywater's forecast operating costs ($m)

	2011-12	*2012-13*	*2013-14*	*2014-15*
Bulk water	91.03	114.94	134.91	158.94
Materials & services	9.54	11.13	11.07	11.44
Employees & contractors	55.74	54.24	56.11	57.91
Corporate costs	58.23	48.34	52.28	48.13
Electricity	7.16	8.57	9.87	10.49
Non recurrent costs	4.96	6.34	4.46	4.62
Tax	10.79	6.27	5.46	5.71
Other	10.45	10.60	11.00	11.51
Total operating costs	**247.90**	**260.43**	**285.16**	**308.76**

Note: Excludes unregulated services. Source: Unitywater (2013b).

Unitywater's submitted 2013-14 total operating costs are 9.3% or $24 million higher than 2012-13 estimated actual costs, although this includes a $20 million increase in bulk water costs, which Unitywater has little control over. The remaining $4 million relates to higher retail-distribution operating costs, led by increases in corporate costs (Figure 7).

Figure 7 Contributions to change in operating costs 2013-14

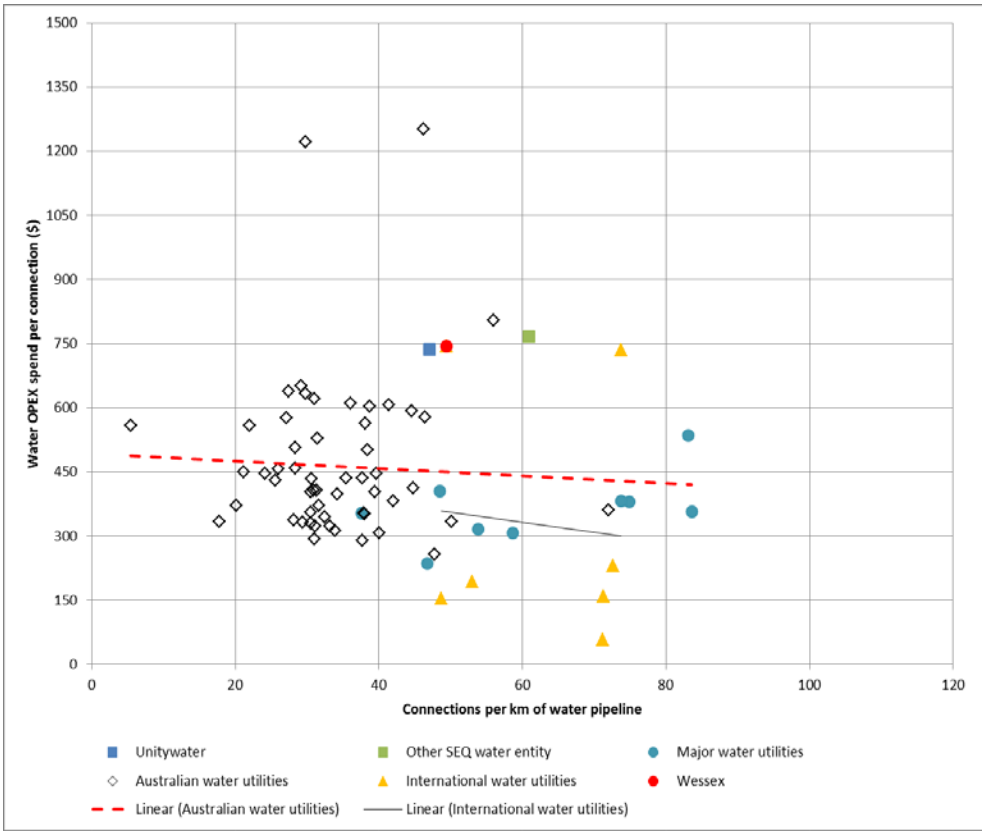


Source: Unitywater (2013b).

5.3 Benchmarking

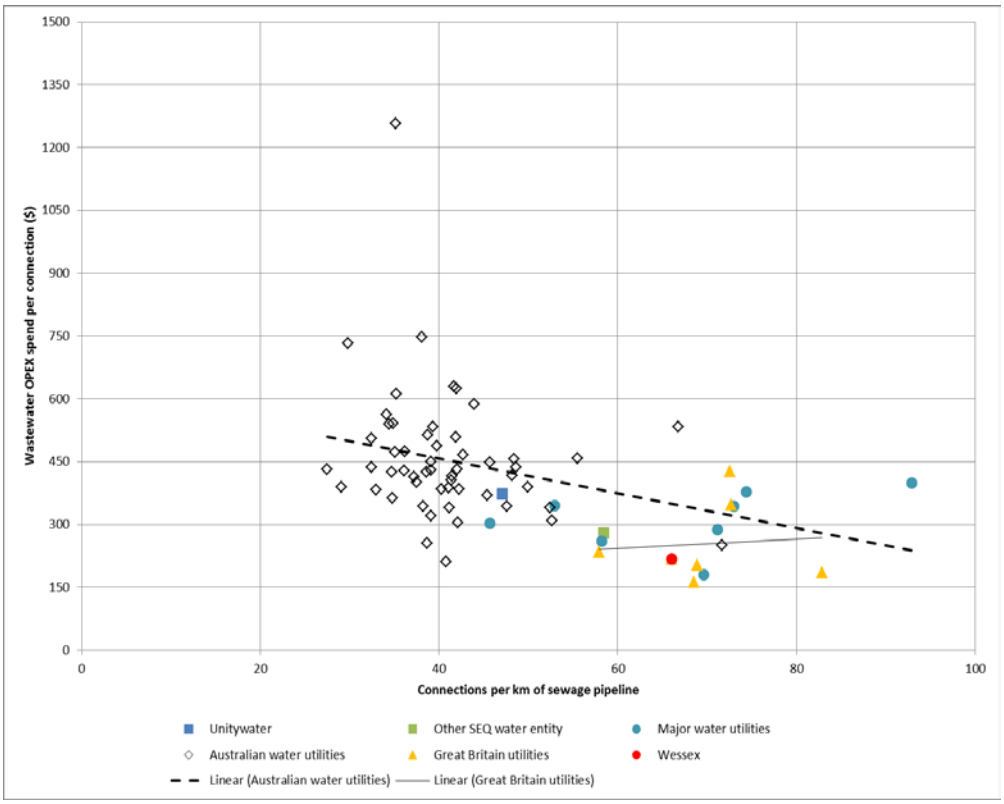
SKM conducted high-level benchmarking analysis drawing on international and domestic comparators (2013b). SKM concluded that Unitywater's water operating costs were higher than comparable entities, but its sewerage operating costs compared more favourably.

Figure 8 Water operating cost benchmarking



Source: SKM (2013b).

Figure 9 Sewerage operating cost benchmarking



Source: SKM (2013b).

5.4 Policies and planning

SKM (2013b) has found Unitywater's policies and procedures for operating costs to be generally consistent with good industry practice. However, SKM found that Unitywater's asset management practices could be improved and Unitywater does not take a regional perspective in its operating cost decisions (Table 39). The QCA has noted areas of improvement for budget formation below.

Table 39 Assessment of Unitywater's operating cost policies

Policy	*SKM assessment*	*Possible areas for improvement*
Legislative compliance	**Consistent with good industry practice and robust**.	
Regional perspective	**Not consistent**. SKM found that Unitywater's Netserv Plan does not meet the regional requirements of the DR Act.	Unitywater has recently undertaken a Treatment Services Strategy to consider a high level strategic review of how it provides treatment services over its entire region. Implementation of this strategy would be a step forward in achieving the requirement of a regional perspective for operating cost decisions.
Asset management	**Not consistent**. SKM found that Unitywater has not yet fully implemented a CAMS that meets the ISO 55000 series.	Unitywater has targeted a number of projects for improvement in asset management including: (a) strategy review by 1 July 2014 (b) documentation of all maintenance activities by December 2013
Procurement	**Consistent with good industry practice and robust**.	
Budget formation	**Consistent with good industry practice and robust**.	QCA considers that Unitywater should seek to reconcile forecast tariffs and revenues in its budget process and consider use of external benchmarks to demonstrate prudency and efficiency of key operating cost categories.

Source: SKM (2013b).

The QCA notes SKM's findings and notes that Unitywater has committed to a range of improvements to its asset management practices and is implementing a strategy to bring a regional perspective to its operating cost decisions.

5.5 Bulk water

The Ministerial Direction requires the QCA to allow Unitywater to treat bulk water costs as a 'cost-pass-through' item. To this end, the QCA has reviewed Unitywater's tariffs (**Appendix B**) against those charged by Seqwater. Unitywater correctly passes through the bulk water price to customers, as announced by the Queensland Government in May 2013.

However, the QCA understands that Unitywater's 2013-15 bulk water cost estimates were prepared at an earlier date and were based on the previous price path announced in 2010. The QCA has applied the more recent bulk water prices, which are $25/ML lower for Moreton Bay and Sunshine Coast. The QCA has also reviewed Unitywater's demand (see Chapter 3) and recommended lower a bulk water demand forecast. In total, the QCA has recommended a 4.2% and 8.1% reduction to 2013-14 and 2014-15 bulk water costs respectively (Table 40).

Table 40 Bulk water cost forecasts

	2013-14	*2014-15*
Unitywater submitted bulk water cost ($m)	134.91	158.94
Unitywater submitted bulk water demand (ML)	62,239	65,184
QCA revised bulk water demand (ML)	60,521	61,451
Weighted average bulk water price ($/kl)	$2.14	$2.38
QCA revised bulk water cost ($m)	$129.26	$146.07
Variance ($m)	-$5.65	-$12.87
Variance (%)	-4.19%	-8.10%

Source: Unitywater (2013b), 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 over 85% of Unitywater's non-bulk operating costs in 2013-15 (Table 41).

Table 41 Unitywater operating costs sampled for review ($m)

Cost	*2012-13*	*2013-14*	*2014-15*
Materials & services	11.13	11.07	11.44
Employees & contractors	54.24	56.11	57.91
Corporate costs	48.34	52.28	48.13
Electricity	8.57	9.87	10.49
Total sample	**122.29**	**129.33**	**127.97**
Total non-bulk operating costs	145.49	150.25	149.82

Source: Unitywater (2013b).

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

(a) prudent - required to meet Unitywater'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

Unitywater's materials and services costs include consumables, pipes, fitting and repairs and maintenance. Excluding unregulated costs, Unitywater forecasts $11.1 million of materials and services costs in 2013-14, followed by $11.4 million in 2014-15.

SKM noted that Unitywater had implemented changes to its procurement practices, with an objective to deliver a 5% saving on procured items. Unitywater maintains a procurement

savings register, which includes realised savings for materials and services items such as facilities management and pipes and fittings.

Although there was a re-categorisation of Unitywater's materials and services costs in the 2013-15 submission, SKM reviewed Unitywater's progress against the $2.2 million saving recommended by Halcrow (2013) during the QCA's 2012-13 review. Applying growth and escalation factors to 2011-12 actuals, SKM estimated that Unitywater's 2013-14 materials and services costs were $2.45 million below this 'baseline'. As a result, SKM concluded that Unitywater had achieved Halcrow's recommended savings.

While SKM was unable to precisely reconcile Unitywater's 2013-15 materials and services budget, it used cost escalation factors and demand growth to conclude that Unitywater under estimated expenditure As a result, SKM concluded that Unitywater's materials and services expenditure was efficient.

The QCA accepts SKM's assessment (Table 42).

Table 42 Revised Unitywater materials and services costs ($m)

	2012-13	***2013-14***	***2014-15***
Water	3.34	3.01	3.11
Wastewater	7.79	8.07	8.33
QCA Total	11.13	11.07	11.44
Unitywater Proposed Total	11.13	11.07	11.44
Variance	-	-	-

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

5.6.2 Employee and contractor costs

Unitywater (2013a) has adopted a zero-based forecast methodology for employee and contractor expenses. Unitywater has forecast employee and contractor expenses of $56.1 million in 2013-14, rising to $57.9 million in 2014-15.

Full-time equivalent positions

Unitywater has budgeted for 918.2 FTEs in 2013-14, a 1.7% reduction from 2012-13.

Due to an internal restructure, SKM was unable to undertake a complete reconciliation of the budgeted decline in FTEs. However, SKM noted Unitywater's advice that no additional FTEs are being approved.

In light of the reduction in budgeted FTEs and SKM's assessment, the QCA does not recommend any further reduction.

Employee cost escalation

Unitywater (2013a) has submitted a cost escalation factor of 4.05% per annum for labour costs in 2013-15, based on its current Certified Agreement, which stipulates a 3.8% wage increase plus 0.25% for the federal government's superannuation guarantee increase. The QCA notes that this increase is comparable to long term averages of the wage price index (Table 43).

Table 43 Wage price index

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

Source: ABS (2013).

SKM noted that Unitywater's wage increase was high, but consistent with other Enterprise Bargaining Agreements where entities have had difficulty in attracting skilled tradespeople and engineers.

The QCA accepts SKM's assessment.

Overtime

SKM noted that the proportion of overtime expenses in Unitywater's Treatment Plants (9.4%) and Field Services (7.2%) operational areas appeared high. However, at a higher level of aggregation, Unitywater's Infrastructure Services overtime was in line with SKM's recommended 5% best practice benchmark. For this reason, SKM did not recommended any overtime-related savings, but that overtime levels in Treatment Plants and Fields Service are monitored.

The QCA accepts SKM's assessment.

Productivity

SKM referred to work undertaken by Halcrow (2013) during the QCA's 2012-13 review, which identified productivity savings expected to be achieved as part of Unitywater's investment in CAMS. Unitywater's Field Services operations were expected to move from 'Basic' to 'Improved' as staff spent more time performing field work as opposed to travelling and preparation.

SKM noted that labour cost improvement has not yet been achieved. SKM therefore recommended a 5% reduction to Unitywater's $26.4 million of Field Service employee expenses, a saving of $1.32 million. Using Unitywater's employee cost growth rate of 3.1%, SKM estimated a corresponding 2014-15 saving of $1.36 million.

In response, Unitywater submitted that the CAMS project was not completed until June 2013, and that savings could therefore not be achieved in 2012-13 and will not be fully realised in 2013-15. Unitywater considers that the CAMS project provides a platform to enable cost savings, but that savings will be realised as part of Unitywater's current Productivity Support Project.

The QCA notes that the work undertaken by Halcrow (2013) recommended a saving of 15% as Field Services moved from 'Basic' to 'Improved'. Halcrow also estimated that a further saving of 12% was possible, as Field Services moved to 'Best in Class'. The 5% saving applied by Halcrow in 2012-13 was made in recognition that improvements in operations would occur over time. Halcrow recommended further savings of 5% per annum over the following two to three years. This implies an efficient level of Field Services employee expenses of $24.0 million in 2013-14.

However, SKM noted that Unitywater did not achieve the recommended cost savings in 2012-13, and instead applied the 5% savings in 2013-14. This provides an estimate of efficient

2013-14 costs of $25.1 million, still 4.4% above that considered efficient by Halcrow. This effectively allows Unitywater to delay the achievement of Halcrow's recommended efficiency gains.

The QCA considers that this is consistent with Unitywater's submission that the opportunity to make cost savings in 2012-13 was limited. Despite this, the QCA notes that project delivery is within Unitywater's control. Delays or revisions to projects do not necessarily change the efficient level of costs.

Unitywater also submitted that the 2013-14 budgeted Field Services employee costs already include a 2.4% efficiency gain relative to the escalated level of actual costs in 2012-13 (Table 44).

Table 44 Field Services efficiency savings ($m)

	2012-13 actuals	*2012-13 escalated actuals**	*2013-14 budget*	*Implied efficiency saving ($m)*	*Implied efficiency saving (%)*
Information provided to SKM	25.3	26.3	26.4	-0.1	-0.4%
Unitywater's subsequent submission	26.1	27.1	26.4	0.7	2.4%

*Note: * 2012-13 actuals have been escalated by 4.05% for comparison to 2013-14 budget. Source: SKM (2013b), Unitywater (2013)*

The QCA notes that Unitywater's subsequent submission differs from that provided to SKM. Further, the implied efficiency saving of 2.4% has resulted from an upward revision to 2012-13 actual costs. Upward revisions to historical cost estimates are not compelling evidence of efficiency savings. SKM's review has considered the level of budgeted costs in 2013-14 and recommended a 5% saving. The QCA does not believe that Unitywater's subsequent submission refutes SKM's analysis and has accepted SKM's savings (Table 45).

Table 45 Recommended employee and contractor expenses ($m)

	2012-13	*2013-14*	*2014-15*
Water	15.83	15.69	16.19
Wastewater	38.40	39.10	40.36
QCA Total	54.24	54.79	56.55
Unitywater Submitted	54.24	56.11	57.91
Variance	-	-1.32	-1.36

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

5.6.3 Corporate costs

Corporate costs are general corporate expenditures that cannot be readily allocated to other cost types. Unitywater has budgeted $52.3 million in corporate costs for 2013-14 (Table 46). This is forecast to decrease by 7.9% to $48.1 million in 2014-15.

Table 46 Unitywater 2013-14 corporate costs ($'000)

	Employee	*Contractors*	*Licence & regulatory*	*Materials & services*	*Total*
Office of CEO	677.6	-	-	44.2	721.8
People, culture & safety	5,418.3	323.8	-	618.0	6,360.1
Finance & regulatory services	5,742.9	446.0	724.6	732.7	7,646.2
ICT	6,028.3	3,818.7	-	6,079.1	15,926.1
Retail services	8,188.8	5,467.3	150.0	3,254.3	17,060.4
Corporate services	9,533.8	576.3	61.1	13,871.8	24,043.0
Business improvements	-	1,942.2	-	2,807.8	4,750.0
Corporate finance	300.0	-	-	-23,562.8	-23,262.8
Total	**35,889.7**	12,574.3	935.7	3,845.1	53,244.8

Note: Includes non-regulated services corporate costs. Source: Unitywater (2013b).

Corporate employee costs

Unitywater's cost per corporate employee in 2012-13 is expected to be $124,954. Unitywater has forecast this to decrease by 0.8% in 2013-14 and increase by 3.4% in 2014-15.

SKM found that the average cost for corporate employees is relatively high compared to similar organisations in SEQ. Given this assessment, Unitywater's proposed escalation of corporate employee costs in 2014-15 would appear to be excessive. SKM has therefore recommended that the increase should be more closely aligned with recent increases in the Queensland public service which have been of the order of 2.2%.

The QCA accepts SKM's recommendation and has applied an escalation rate of 2.2% to Unitywater's 2014-15 corporate employee costs (Table 47).

Table 47 Unitywater's corporate employee costs ($m)

	2012-13	*2013-14*	*2014-15*
Unitywater submitted corporate employee costs	34.12	33.34	34.46
QCA recommended corporate employee costs	34.12	33.34	33.76
Variance	-	-	-0.70

Note: Source: Unitywater (2013), SKM (2013b).

SKM noted that 8.2% of Unitywater employees are in the People, Culture and Safety division. Drawing on Deloitte's (2011) review of Sunwater costs, SKM has concluded that an appropriate ratio for Unitywater would be 4%. SKM therefore recommended a reduction of 37.9 FTEs in 2013-14, a saving of $4.7 million. Using Unitywater's forecast growth in corporate employee costs of 3.4%, SKM estimated a corresponding 2014-15 saving of $4.9 million.

In response to SKM's final report, Unitywater provided further information to support its view that the employees in its People, Culture and Safety division include 39 staff that are administration services staff and are not involved in providing HR support. The information provided by Unitywater indicated that these staff are mostly Integrated Services Staff and Administration Officers. Unitywater provided position descriptions for these roles.

The QCA has reviewed the additional information provided by Unitywater and accepts that 39 FTEs in the People, Culture and Safety division do not provide HR services. The QCA therefore concludes that Unitywater's HR FTEs are efficient and has not made any adjustments to Unitywater's HR staff.

SKM's review found that Unitywater's off-budget target of achieving 5% savings to 2013-14 support costs is likely to involve staff reductions in its finance and regulatory function. These reductions could be achieved through economies of scale from amalgamation, business improvement initiatives and the greater use of information technology. SKM therefore applied a 5% saving to corporate support costs resulting in a reduction of 2.7 FTEs, equivalent to $335,000 in 2013-14. Using Unitywater's forecast growth in corporate employee costs of 3.4%, SKM estimated a corresponding 2014-15 saving of $348,567.

In response to SKM's findings, Unitywater stated that when it was created no corporate functions were transferred from Councils as these activities continued to be performed by each Council.

The QCA notes that SKM's finding of excess FTEs in the Finance and Regulatory Services Division relied only partly on the rationale that the concentration of these activities within one entity could be expected to lead to efficiencies in service provision. Further, even though these functions were not transferred to Unitywater upon inception, it can be expected to perform these services more efficiently over time than if the functions had remained split between several smaller entities.

The QCA therefore accepts SKM's findings.

Corporate non-labour costs

SKM found Unitywater's corporate non-labour costs to be efficient as they are relatively small.

The QCA accepts SKM's recommendation.

Conclusion

The QCA considers that there is scope for Unitywater to make savings in its corporate costs (Table 48).

Table 48 Adjustments to Unitywater's corporate costs ($)

Adjustment	*2013-14*	*2014-15*
Corporate employee cost escalation	-	-706,000
Reduction of 2.7 corporate support FTEs	-335,000	-348,567
Total adjustments	**-335,000**	**-1,054,567**

Source: SKM (2013b).

5.6.4 Electricity

Unitywater purchases electricity through two contracts - one for large sites that consume more than 100 MWh per annum and the other for small sites. The contract for small sites commenced in 2012-13 for a two-year period. The contract for large sites is a one-year contract that expires at the end of 2013.

Energy use

The overall growth in electricity costs forecast by Unitywater is 15.07% in 2013-14 and 6.36% in 2014-15. This growth in costs is driven by a combination of higher prices and increased electricity use. Given that Unitywater has forecast prices increases of 7.32% and 4.05% for 2013-14 and 2014-15 respectively, the implied growth in electricity use is 7.23% and 2.22% in 2013-14 and 2014-15 respectively.

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 wastewater services).

The QCA has therefore used its forecast growth in bulk water volumes and sewerage connections to forecast growth in Unitywater's energy use and has revised Unitywater's forecast of growth in its energy use down to 2.22% in 2013-14.

Retail electricity prices for large sites

The electricity costs that Unitywater submitted for 2013-14 are based on forecast increases in the energy and network components of the retail price for its large sites which make up the bulk of its electricity budget. The forecasts were determined on the basis of advice provided to Unitywater by Energetics before Unitywater renewed its electricity contracts in May 2013.

Table 49 isolates the impact of changes in price on electricity costs. It compares Unitywater's electricity costs for large sites in 2012-13 and 2013-14 using Energetics' forecast of energy prices for 2013-14, Unitywater's actual energy prices for 2013-14 and estimated actual energy use in 2012-13.

Table 49 Impact of price changes on Unitywater's retail electricity costs for its large sites ($m)

	2012-13 (estimated actual)	*2013-14# (impact of Energetics' forecast of energy prices)*	*2013-14# (impact of contracted energy prices)*
Peak energy cost*	1.57	1.49	1.81
Off-peak energy cost*	1.20	1.14	1.33
Renewable energy cost	0.55	0.47	0.48
Network costs	3.31	4.02	4.02
Regulatory costs	0.04	0.04	0.04
Total cost	**6.67**	**7.16**	**7.68**

*Note: # change in costs due to change in price alone (no change in quantity) * inclusive of carbon price. Source: Unitywater (2013).*

The revised forecasts are for energy prices to increase between 2012-13 and 2013-14. The QCA has undertaken its analysis on the basis of the revised information.

Under the revised information, Unitywater is forecasting an increase in retail electricity prices of 15.2% in 2013-14. This is as a result of increases in energy charges and network charges.

Energy component of retail electricity prices for large sites

As the increase in energy prices is based on contract rates for large contestable sites, the QCA accepts this to be efficient.

Network component of retail electricity prices for large sites

A major component of Unitywater's forecast increase in retail electricity prices is attributable to network charges which are forecast to increase by 21.5% in 2013-14. The QCA considers that regulated network charges for large sites will increase by 15.9% in 2013-14. This assessment is based on the QCA's retail electricity determination (QCA 2013b). The QCA has therefore applied an increase of 15.9% in network charges for 2013-14. This reduces Unitywater's revised electricity price escalation factor from 15.2% to 12.4% in 2013-14 (Table 50).

Table 50 QCA adjustment to Unitywater's retail electricity costs for large sites ($m)

	2012-13	*2013-14*
Peak energy cost*	1.57	1.81
Off-peak energy cost*	1.20	1.33
Renewable energy cost	0.55	0.48
Network costs	3.31	3.84
Regulatory costs	0.04	0.04
Total cost	6.67	7.49
Increase in total costs (%)		12.4

*Note: * inclusive of carbon price. Source: Unitywater (2013), QCA calculations.*

Retail electricity prices for small sites

Unitywater's submitted electricity costs for 2013-14 are based on forecast increases in retail electricity prices for its large sites which make up the bulk of its electricity budget. The QCA notes that small sites make up only 21% of Unitywater's electricity costs and, with the QCA determined 15% increase in regulated retail tariffs in 2013, would contribute less than one percent to the weighted average increase in Unitywater's electricity costs in 2013-14.

The QCA has reflected Unitywater's price escalation in 2014-15.

Summary

In summary, the QCA has escalated Unitywater's 2012-13 electricity costs by 14.9% to obtain forecast electricity costs for 2013-14. This consists of a 12.4% increase in electricity prices and a 2.2% increase in electricity use. The QCA has escalated electricity costs in 2013-14 by 6.4% as proposed by Unitywater to estimate 2014-15 costs. The total effect of the QCA's adjustments is shown in Table 51.

Table 51 Revised Unitywater electricity costs ($m)

	2012-13	***2013-14***	***2014-15***
Large sites	6.67	7.63	8.06
Small sites	1.90	2.18	2.30
QCA Total	8.57	9.81	10.37
Unitywater Proposed Total	8.57	9.87	10.49
Variance	-	-0.06	-0.12

Source: QCA calculations.

5.6.5 Tax

Unitywater submitted a tax cost of $5.46 million in 2013-14. The QCA's tax estimate is calculated to be consistent with its estimate of the MAR (chapter 7).

Table 52 Tax ($000)

	2013-14	***2014-15***
Unitywater Submitted	5.46	5.71
QCA Recommended	8.43	6.39
Variance	2.97	0.68

Source: QCA calculations.

5.7 Operating costs summary

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

(a) lower bulk water prices and demand (-$18.5 million)

(b) employee cost savings due to productivity gains in Field Services operations (-$2.7 million)

(c) lower escalation factors and FTE numbers in other corporate employee (-$1.4 million)

(d) revisions to Unitywater's usage and price forecasts of electricity (-$0.18 million)

(e) a revised tax estimate (+$3.7 million).

Overall, this is a reduction of $19.1 million or 3.2% of Unitywater's operating costs. Excluding the revision to bulk water costs (-$18.5 million), it is a $0.6 million or 0.2% reduction to non-bulk operating costs.

Table 53 Revised operating costs 2012-13 to 2014-15 ($m)

	2013-14	***2014-15***
Bulk water	129.26	146.07
Materials & services	11.07	11.44
Employees & contractors	54.79	56.55
Corporate costs	51.94	47.08
Electricity	9.81	10.37
Non recurrent costs	4.46	4.62
Tax	8.43	6.39
Other	11.00	11.51
Total Operating costs	280.77	294.04
Unitywater Proposed Total	285.16	308.76
Variance	-4.39	-14.72

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

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

Unitywater 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) its WACC of 7.62%, which it considered to be a more stable long-term benchmark than the QCA's revised benchmark WACC of 6.57%, noting its concerns would be raised during the QCA's broader WACC review.

As noted in chapter 4, the QCA accepts Unitywater'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%.

6.3 Costs for 2013-15

The key components of Unitywater's costs for its water and sewerage activities are set out in Table 54 and Table 55 below.

Table 54 Unitywater Costs - Water ($m)

	2012-13	***2013-14***	***2014-15***
Bulk water	114.9	134.9	158.9
Other operating costs	53.7	52.8	51.5
Return on capital	52.0	60.7	62.4
Return of capital	33.5	31.9	31.7
Total Costs	**254.1**	**280.3**	**304.5**

Source: Unitywater (2013 and 2012).

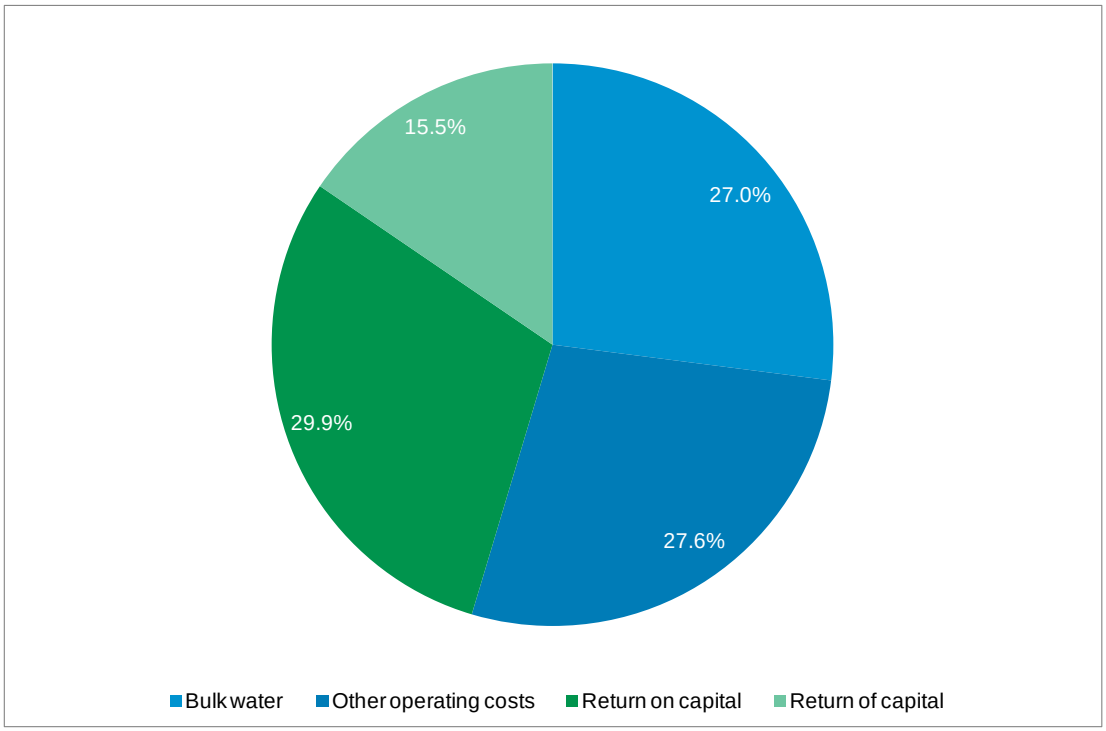
Table 55 Unitywater Costs - Sewerage ($m)

	2012-13	*2013-14*	*2014-15*
Other operating costs	90.1	97.4	98.3
Return on capital	85.9	98.3	103.7
Return of capital	55.3	51.6	53.1
Total Costs	**231.3**	**247.3**	**255.1**

Source: Unitywater (2013 and 2012).

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

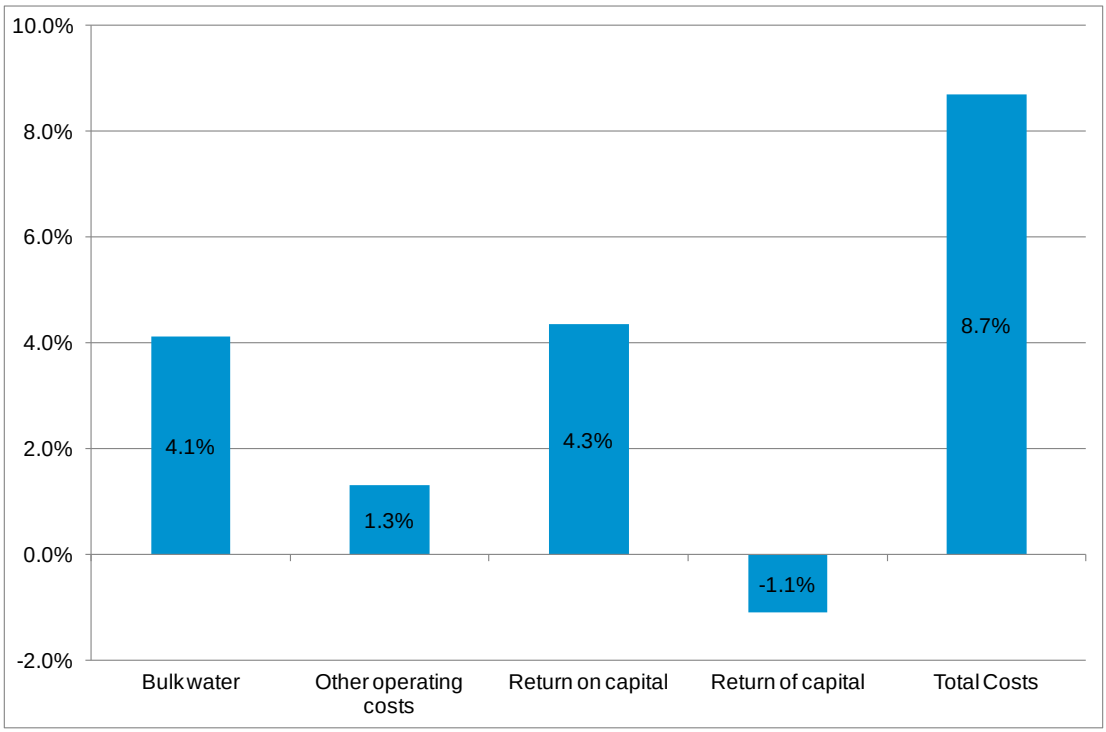
Figure 10 Unitywater total costs for 2013-15



Source: Unitywater (2013).

The drivers of change in Unitywater's total costs in 2013-14 are set out in Figure 11 below.

Figure 11 Contribution to change in Unitywater's total costs in 2013-14



Source: Unitywater (2013, 2012).

QCA MAR for 2013-15

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

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

The differences between Unitywater'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 (-$18.5 million)

(b) net reductions to retail-distribution operating costs (-$0.6 million) arising from:

  (i) reduced employee expenses incurred due to operations overtime (-$2.7 million)

  (ii) lower escalation factors and FTE numbers in corporate employee costs (-$1.4 million)

  (iii) revisions to Unitywater's usage and price forecasts of electricity (-$0.18 million) and

  (iv) a revised tax estimate (+$3.7 million)

(c) a lower estimate of return on capital due to the QCA's lower WACC of 6.57% compared to Unitywater's WACC of 7.62% (-$43.9 million)

(d) a slightly higher return of capital, due to differences in indexation of the RAB ($1.0 million).

Table 56 QCA MAR - Water ($m)

	2012-13	*2013-14*	*2014-15*
Bulk water	114.4	129.3	146.1
Other operating costs	51.4	53.9	51.0
Return on capital	53.2	52.0	53.2
Return of capital	33.4	38.5	32.4
Total Costs	**252.3**	**273.6**	**282.7**

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

Table 57 QCA MAR - Sewerage ($m)

	2012-13	*2013-14*	*2014-15*
Other operating costs	86.0	97.6	97.0
Return on capital	92.3	86.0	90.0
Return of capital	48.5	51.1	47.3
Total Costs	**226.8**	**234.7**	**234.3**

*Note: * 2012-13 capital contributions are offset against return on capital under the revenue offset approach adopted by Unitywater 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 Unitywater Submission

Unitywater 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, Unitywater submitted:

(a) water revenue of $242.3 million is below its total costs of $280.3 million

(b) sewerage revenue of $214.0 million is below its total costs of $247.3 million and

(c) as a whole, revenues of $456.4 million are below total costs of $527.6 million.

For 2014-15, Unitywater submitted:

(a) water revenue of $271.9 million is below its total costs of $304.5 million

(b) sewerage revenue of $225.6 million is below its total costs of $255.1 million and

(c) as a whole, revenues of $497.5 million are below total costs of $559.6 million.

As in previous years, Unitywater continued to propose the MAR Adjustment Transition Scheme to capture and carry forward revenue under-recoveries. Carried forward balances may be recouped in the future over a period to be determined with relevant stakeholders.

7.2 QCA Analysis

Caveat on 2014-15 findings

As noted previously, Unitywater has not yet set its prices for 2014-15. As Unitywater is anticipating some further 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 Unitywater'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 Unitywater 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 Unitywater revenues and QCA MAR

A comparison of Unitywater'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 Unitywater for 2013-14:

(a) water revenue of $253.2 million is 7.5% below the QCA MAR of $273.6 million

(b) sewerage revenue of $216.0 million is 8.0% below the QCA MAR of $234.7 million

(c) as a whole, revenues of $469.1 million are 7.7% below the QCA MAR of $508.3 million.

For Unitywater for 2014-15:

(a) water revenue of $282.3 million is 0.1% below the QCA MAR of $282.7 million

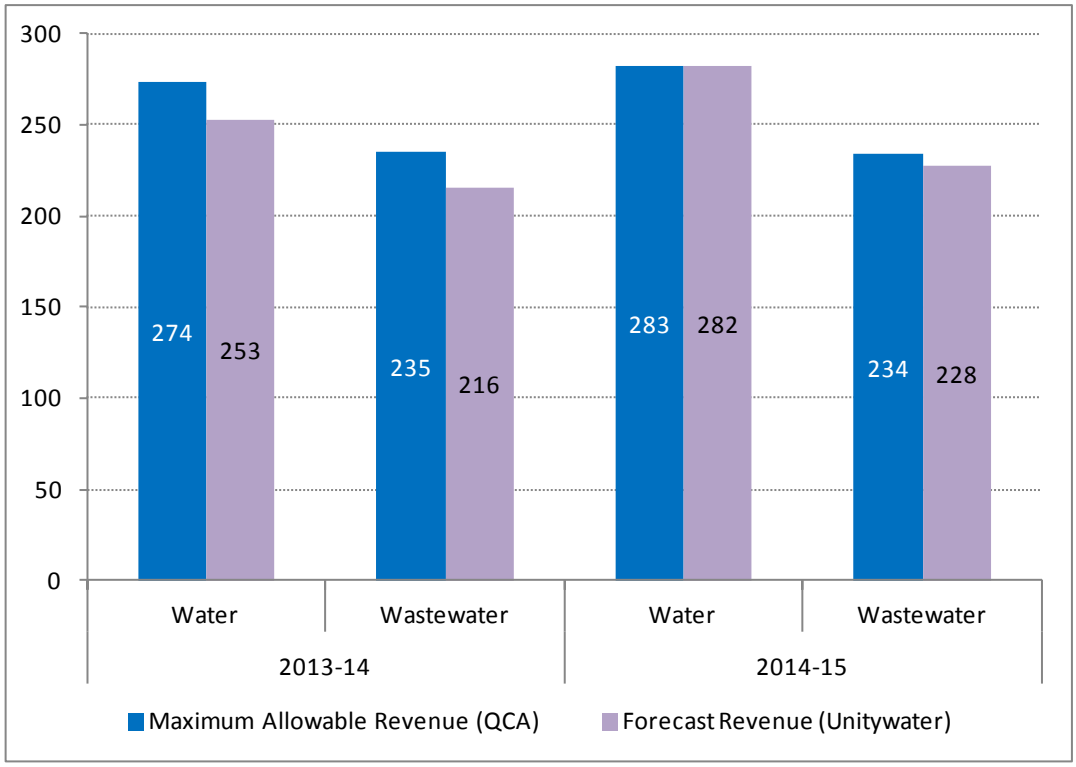
(b) sewerage revenue of $227.5 million is 2.9% below the QCA MAR of $234.4 million

(c) as a whole, revenues of $509.8 million are 1.4% below the QCA MAR of $517 million.

The revenue estimates are from the Unitywater data template (sheet 5.2.1 revenue by geographic area and service category). These revenues are higher than those used by Unitywater in its comparison with the MAR, which are drawn from a different part of the Unitywater data template (sheet 5.1.1 consolidated statement of financial performance).

The QCA has adopted the Unitywater revenue estimates from sheet 5.2.1, consistent with its approach in previous years and for other entities.

Figure 12 MAR vs revenue ($m)



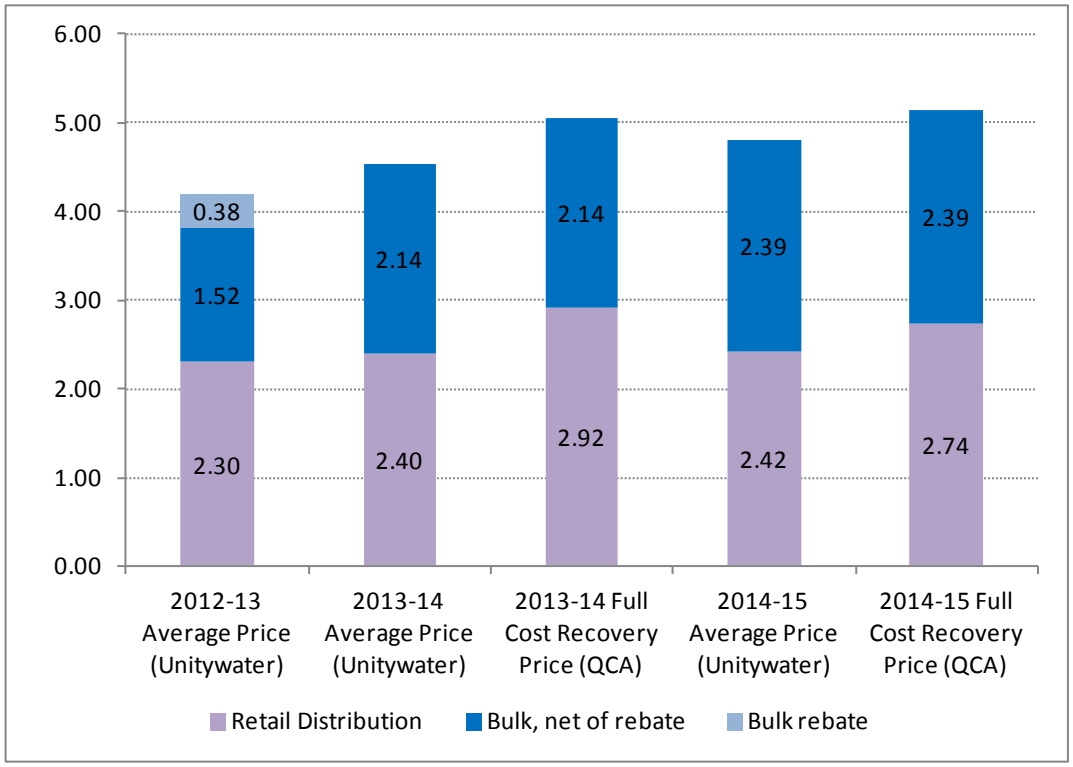
Source: Unitywater (2013), QCA calculations.

Comparison of average prices

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

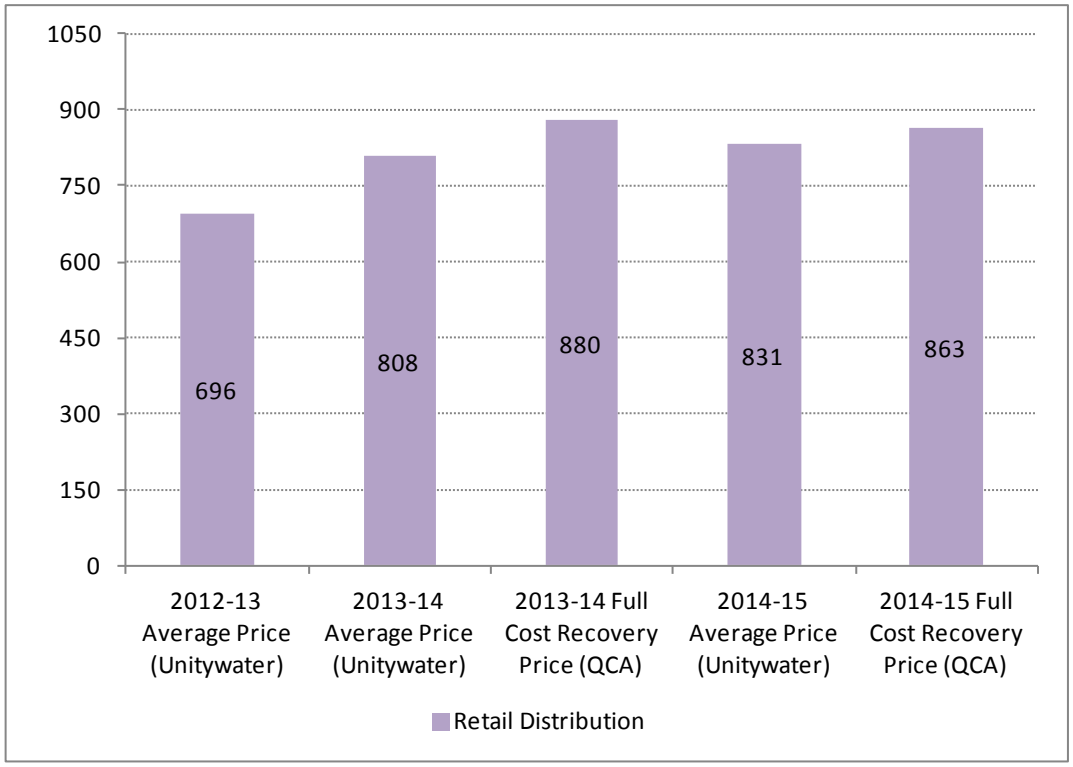
Unitywater's average annual prices are slightly below the prices which would fully recover costs for 2013-14 and 2014-15 (as shown in Figure 13 and Figure 14 below). As stated in previous reports, prices should ideally be set and smoothed over a longer period to avoid large annual variations.

Figure 13 Average water prices ($/kl)



Source: Unitywater (2013), QCA calculations.

Figure 14 Average sewerage prices ($/connection)



Source: Unitywater (2013), 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 Unitywater 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 58 Further comparison of revenues and QCA MAR ($m)

	2013-14	***2014-15***
QCA MAR	508.3	517.0
QCA Expected Revenues	450.4	483.8
Difference	-57.6	-33.2

Source: Unitywater (2013), QCA calculations.

Carrying forward under-recoveries

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 Unitywater's approach in those years.

However, in its past submissions, Unitywater proposed to capture and carry forward under and over-recoveries (2011, 2012).

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 Unitywater's discretion to forego these revenues and accept a lower rate of return. Where this does not jeopardise the financial viability of the entity this is a legitimate business decision. The QCA noted that Unitywater had not priced to the level of the cap (2013a).

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

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

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

typically hinges on this longer term information. The QCA has calculated annual stand-alone MARs pending this detailed information.

QCA Finding

As Unitywater'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 59 and Table 60 below.

Table 59 Costs and revenues 2013-15 ($m)

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	Uw	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*
Bulk water	134.9	129.3			158.9	146.1	-	
Other opex	52.8	53.9	97.4	97.6	51.5	51.0	98.3	97.1
Return on capital	60.7	52.0	98.3	86.0	62.4	53.2	103.7	90.0
Return of capital	31.9	38.5	51.6	51.1	31.7	32.4	53.1	47.3
Total Costs (MAR)	**280.3**	**273.6**	**247.3**	**234.7**	**304.5**	**282.7**	**255.1**	**234.3**
Total Revenues	242.3	253.2	214.0	216.0	271.9	282.3	225.6	227.5
Over/(Under) recovery	**-38.0**	**-20.4**	**-33.2**	**-18.7**	**-32.6**	**-0.4**	**-29.5**	**-6.8**

Source: Unitywater (2013), QCA calculations.

Table 60 Average Prices

	2013-14				*2014-15*			
	Water		*Sewerage*		*Water*		*Sewerage*	
	Uw	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*	*Uw*	*QCA*
Total Revenues/ MAR ($m)	253.2	273.6	216.0	234.7	282.3	282.7	227.5	234.3
Volume ('000 ML or '000 connections)*	55.8	54.1	267.4	266.7	58.7	55.1	273.7	271.6
Average Price ($/kl or $/connection)	**$4.54**	**$5.06**	**$807.67**	**$880.17**	**$4.81**	**$5.13**	**$831.16**	**$862.60**

*Note: *Only includes chargeable volume, which is lower than the total water demand in Section 3. Source: Unitywater (2013), QCA calculations.*

9 KEY FINDINGS FOR 2013-15

In 2013-14, the retail and distribution component of prices for residential and non-residential customers were subject to tariff restructure with increased emphasis on volumetric charges. Prices not subject to tariff restructure increased by 3%. Unitywater 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 26.0% of Unitywater's total costs of supplying water and sewerage activities in 2013-15. Retail and distribution costs account for the remainder with operating costs comprising 28.2% and capital costs 45.7%.

For Unitywater for 2013-14:

(a) water revenue of $253.2 million is 7.5% below the QCA MAR of $273.6 million

(b) sewerage revenue of $216.0 million is 8.0% below the QCA MAR of $234.7 million

(c) as a whole, revenues of $469.1 million are 7.7% below the QCA MAR of $508.3 million.

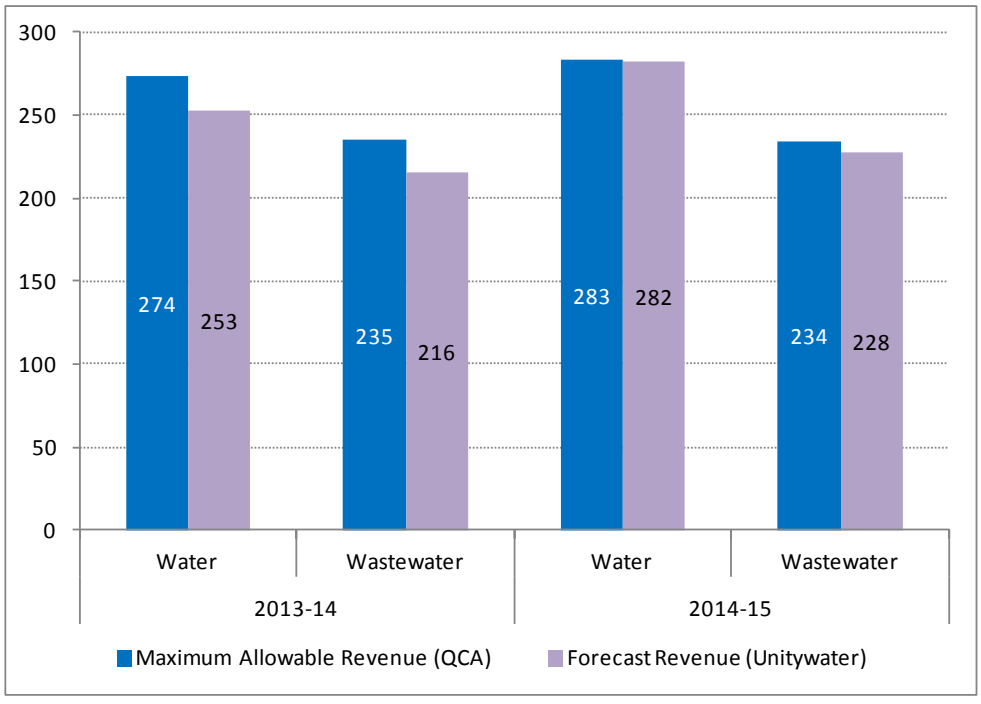
For Unitywater for 2014-15:

(a) water revenue of $282.3 million is 0.31% below the QCA MAR of $282.7 million

(b) sewerage revenue of $227.5 million is 2.9% below the QCA MAR of $234.3 million

(c) as a whole, revenues of $509.8 million are 1.4% below the QCA MAR of $517.0 million.

Figure 15 MAR and revenue ($m)



Source: Unitywater (2013), 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 Unitywater'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: UNITYWATER SELECTED PRICES

As noted in chapter 2, Unitywater has restructured water and sewerage prices for stand-alone residential houses (68.2% of customers) from 1 July 2013 to increase the volumetric component. All other properties will receive a 3% increase in prices until they move onto the new price structure, being phased in progressively for sporting groups (1 October 2013), residential vacant land (1 January 2014), residential unit complexes (by June 2014) and all other customers over the period to 30 June 2015.

As a result, Unitywater provided two sets of prices for 2013-14, the first for customers subject to tariff restructure, the second for customers not subject to tariff restructure. Some customers will transition from the second to the first set over 2013-14 as noted above.

Unitywater also provided the QCA with its prices for trade waste, recycled water and sundry charges.

Water and sewerage prices for customers with tariff restructure[43]

Moreton Bay

Fixed Charge	2012-13	2013-14	% change
Water Access Charge	$346.00	$293.56	-15.2%
Sewerage Access Charge	$744.88	$695.24	-6.7%

Volumetric Charges	2012-13		2013-14		% change
Water -Tier 1	<= 280 kL	0.176	<= 300 kL	0.644	266%
Water -Tier 2	> 280 kL and <= 360 kL	0.849	> 300 kL	1.288	52%
Water -Tier 3	> 360 kL	1.305	N/A		-1%
Sewerage -Tier 1	N/A	N/A	<= 270 kL	0.644	
Sewerage - Tier 2 [1]	N/A	N/A	> 270 kL	1.288	

Sunshine Coast

Fixed Charge	2012-13	2013-14	% change
Water Access Charge	$232.04	$231.76	-0.1%
Sewerage Access Charge	$570.80	$509.84	-10.7%

Volumetric Charges	2012-13		2013-14		% change
Water -Tier 1	<= 219 kL	0.538	<= 300 kL	0.644	20%
Water -Tier 2	> 219 kL	1.036	> 300 kL	1.288	24%
Sewerage -Tier 1	N/A	N/A	<= 270 kL	0.644	
Sewerage - Tier 2 [1]	N/A	N/A	> 270 kL	1.288	

[43] Retail and distribution component only. As noted in chapter 2, where there is a change in tariff structure the best measure of the impact of the change on customers is the change in bills.

Water and sewerage prices for customers without tariff restructure[44]

Moreton Bay

MORETON BAY REGION WATER AND SEWERAGE CHARGES				
Description		charge rate 2012/13	charge rate 2013/14	% Increase
MORETON BAY REGION WATER				
CABOOLTURE WATER				
Caboolture water access charge	Connected price residence or unoccupied land connected to Unitywater's water supply homes; home units; flats or motel units (each); residences attached to businesses and each separate home on one (1) parcel of land connected to Unitywater's water supply	$346.00	$356	3%
Caboolture water access charge	Commercial/Business property connected to Unitywater's water supply; including individual Building Units or Group Title Shops	$346.00	$356	3%
Caboolture water access charge	Other properties not specifically designated above which are connected to Unitywater's water supply, eg schools; churches; halls/lodges; community organisations	$346.00	$356	3%
Caboolture water access charge	Vacant land to which Unitywater will supply a water connection upon receipt of a standard connection fee – for each separate parcel of land provided that in the instance of a dwelling and one adjacent vacant parcel of land which is zoned Residential A owned by one and the same person then this vacant land charge shall not apply to this particular	$346.00	$356	3%
Caboolture water access charge	Dedicated fire hose reel service providing water for the sole purpose of fire fighting equipment, which service is not for domestic use	$0.00	N/A	
Caboolture water access charge	Supply of recycled water through a dedicated recycle water access	0.00	N/A	
Caboolture water consumption charges	**As near as practicable, water meters will be read on a cyclical basis. The charge for water consumed in a quarter will be included on the next quarter's invoice. Water consumption charge is based on daily average consumption of water consumed since the previous meter reading.**			
Caboolture water consumption charge – potable reticulated water	**Water consumed up until 30/06/13 will be charged on the following basis:**			
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.176/kL	
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.849/kL	
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 1.305/kL	
Caboolture water consumption charge – potable reticulated water	**Water consumed after 30/06/13 will be charged on the following basis:**			
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 0.181/kL	11% 3%
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 0.874/kL	11% 3%
Caboolture water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 1.344/kL	11% 3%
Caboolture water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial) 0 to 3kL	0.00	N/A	
Caboolture water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial) 3kL plus	As per Tier 1 to 3	As per Tier 1 to 3	
Caboolture water charges	Dialysis and other medical conditions – allowance as set by UnityWater policy	0.00	N/A	
Caboolture water charges	In relation to the calculation for community title premises (Community Unit, Building Unity or Group Title Plan) without approved sub-metering, water consumption will be apportioned in accordance with the relevant lot entitlements.			
Caboolture water charges	For properties charged multiple access charges the relevant tiers for water consumption will be multiplied by the number of access charges levied.			

[44] Includes bulk water charges, as noted.

PINE WATER				
Pine water access charge	Vacant land – land to which water is available but not connected	$346.00	$356	3%
Pine water access charge	Domestic premises with a 15mm, 20mm supply line with individual	$346.00	$356	3%
Pine water access charge	Domestic community title premises with individual meters	$346.00	$356	3%
Pine water access charge	Domestic flats with individual meters	$346.00	$356	3%
Pine water access charge	All other domestic premises with individual meters not mentioned in the other consumer classes	$346.00	$356	3%
Pine water access charge	Any domestic premises with a shared meter	$346.00	$356	3%
Pine water access charge	Community – public halls (including the MBRC owned and operated); place of worship; parks (including sporting fields); reserves; land occupied by Not for Profit community organisations.	$346.00	$356	3%
Pine water access charge	Dedicated fire hose reel service (industrial/commercial) providing water for the sole purpose of fire fighting equipment which service is not for domestic use	$0.00	N/A	
Pine water access charge	Supply of recycled water through a dedicated recycle water access	$0.00	N/A	
Pine industrial/commercial water access charge	Pine industrial/commercial water access charges include: retirement villages, shops (including cafes, bake houses, butcher shops, garages & service stations); bowling greens and clubhouses; hotels; industrial structures and warehouses; utilities including Energex, Powerlink, Telstra, sewerage/water pump stations, etc; Council facilities; schools, preschools, kindergartens and child care centres; offices; any other building or structure of a commercial or industrial nature not specified below.			
Pine industrial/commercial water access charge	For the industrial/commercial consumer class, an access charge will be determined based on the meter size servicing the property.			
Pine industrial/commercial water access charge	20mm meter, capacity factor 1	$346.00	$356	3%
Pine industrial/commercial water access charge	25mm meter, capacity factor 1	$346.00	$356	3%
Pine industrial/commercial water access charge	32mm meter, capacity factor 2.56	$884.72	$911	3%
Pine industrial/commercial water access charge	40mm meter, capacity factor 4	$1,383.04	$1,425	3%
Pine industrial/commercial water access charge	50mm meter, capacity factor 6.25	$2,161.08	$2,226	3%
Pine industrial/commercial water access charge	65mm meter, capacity factor 10.56	$3,650.84	$3,760	3%
Pine industrial/commercial water access charge	80mm meter, capacity factor 16	$5,531.20	$5,697	3%
Pine industrial/commercial water access charge	100mm meter, capacity factor 25	$8,642.28	$8,902	3%
Pine industrial/commercial water access charge	150mm meter, capacity factor 56.25	$19,445.72	$20,029	3%
Pine industrial/commercial water access charge	200mm meter, capacity factor 100	$34,569.24	$35,606	3%
Pine industrial/commercial water access charge	225mm meter, capacity factor 126.5625	$43,751.28	$45,064	3%
Pine industrial/commercial water access charge	250mm meter, capacity factor 156.25	$54,014.96	$55,635	3%
Pine industrial/commercial water access charge	300mm meter, capacity factor 225	$77,780.80	$80,114	3%
Pine industrial/commercial water access charge	A deemed capacity factor will be calculated as follows: - deemed capacity factor is water consumption for the previous financial year dividend by (280kL) result to be rounded up. - where the deemed capacity factor is less than the applicable meter size capacity factor in the schedule, the access charge is determined by multiplying the deemed capacity factor by $356 - where the deemed capacity factor is greater than the applicable meter size capacity, the access charge will be in accordance with the access charge for the meter size			
Pine water consumption charge – potable reticulated water	**As near as practicable, water meters will be read on a cyclical basis, The charge for water consumed in a quarter will be included on the next quarter's invoice.Water consumption charge is based on daily average consumption of water consumed since the previous meter reading.**			
Pine water consumption charge – potable reticulated water	**Water consumed up until 30/06/13 will be charged on the following basis:**			
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.176/kL	
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.849/kL	
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 1.305/kL	
Pine water consumption charge – potable reticulated water	**Water consumed after 30/06/13 will be charged on the following basis:**			
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 0.181/kL	11% 3%
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 0.874/kL	11% 3%
Pine water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 1.344/kL	11% 3%
Pine water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial) 0 to 3kL	0.00	N/A	
Pine water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial)3kL plus	As per Tier 1 to 3	As per Tier 1 to 3	
Pine water charges	Dialysis and other medical conditions – allowance as set by Unitywater	0.00	N/A	
Pine water charges	In relation to the calculation for community title premises (Community Unit, Building Unity or Group Title Plan) without approved sub-metering, water consumption will be apportioned in accordance with the relevant lot entitlements.			

REDCLIFFE WATER				
Redcliffe water access charge	For all premises connected to Unitywater's water supply other than multi-occupational premises For multi-occupational premises connected to Unitywater's water supply, the charge multiplied by the occupancy multiplier for the OR For each lot in a community titles scheme under the "Body Corporate and Community Management Act 1997" where there are no individual meters for lots in the scheme	346.00	$356	3%
Redcliffe water access charge	For each parcel of vacant or occupied land which is not connected to Unitywater's water supply system but is in Unitywater's service area under the Water Act 2000 (but which does not have a metered property	346.00	$356	3%
Redcliffe water access charge	Dedicated fire hose reel service providing water for the sole purpose of fire fighting equipment, which service is not for domestic use	0.00	N/A	
Redcliffe water access charge	Supply of recycled water through a dedicated recycle water access	0.00	N/A	
Redcliffe water access charge	For the purposes of water access charging "multi-occupation premises" are premises which: - Are classified in Unitywater's land record as "Flats" or "Single Unit Dwelling"; and - Are recorded in the land record as having an occupancy multiplier of greater than 1.			
Redcliffe water consumption charge – potable reticulated water	**As near as practicable, water meters will be read on a cyclical basis. The charge for water consumed in a quarter will be included on the next quarter's invoice. Water consumption charge is based on daily average consumption of water consumed since the previous meter reading.**			
Redcliffe water consumption charge – potable reticulated water	**Water consumed up until 30/06/13 will be charged on the following basis:**			
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.176/kL	
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 0.849/kL	
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2012/13** $ 2.192/kL $ 1.305/kL	
Redcliffe water consumption charge – potable reticulated water	**Water consumed after 30/06/13 will be charged on the following basis:**			
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 1 (For the first 767 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** 2.437/kL 0.181/kL	 11% 3%
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 2 (768 - 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** 2.437/kL 0.874/kL	 11% 3%
Redcliffe water consumption charge – potable reticulated water	Treated water provided to properties through a reticulated water network Tier 3 (above 986 L/day) - State Government bulk water charge - Unitywater charge		**2013/14** $ 2.437/kL $ 1.344/kL	 11% 3%
Redcliffe water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial) 0 to 3kL	0.00	N/A	
Redcliffe water consumption charge – potable reticulated water	Dedicated fire hose reel service (industrial/commercial) 3kL plus	As per Tier 1 to 3	As per Tier 1 to 3	
Redcliffe water charges	Dialysis and other medical conditions – allowance as set by Unitywater	0.00	N/A	

Sunshine Coast

SUNSHINE COAST REGION WATER AND SEWERAGE CHARGES				
Description		charge rate 2012/13	Charge rate 2013/14	% Increase
SUNSHINE COAST REGION WATER				
Water base charge	Unconnected parcels of land	232.04	$239.00	3%
Water base charge	Meters up to 25mm (per connection)	232.04	$239.00	3%
Water base charge	32mm meters (per connection)	596.72	$615.00	3%
Water base charge	40mm meters (per connection)	932.40	$960.00	3%
Water base charge	50mm meters (per connection)	1456.60	$1,500.00	3%
Water base charge	80mm meters (per connection)	3729.60	$3,841.00	3%
Water base charge	100mm meters (per connection)	5827.48	$6,002.00	3%
Water base charge	150mm meters (per connection)	13111.60	$13,505.00	3%
Water base charge	200mm meters (per connection)	23310.00	$24,009.00	3%
Water base charge	Group/strata title developments – per service/connected property on the Group/Strata Title for a meter up to 25mm. (Where two meters are installed on each Group/Strata Title Unit for hot and cold services, only 1 base charge shall apply.)	232.04	$239.00	3%
Water consumption charge	**As near as practicable, water meters will be read on a cyclical basis. The charge for water consumed in a quarter will be included on the next quarter's invoice. Water consumption charge is based on daily average consumption of water consumed since the previous meter reading.**			
Water consumption charge	**For water meter readings prior to 30 June 2013**			
Water consumption charge	For the first 600 L /day - State Government bulk water charge - Unitywater charge		**pre 30/6/2013** $ 1.610/kL $ 0.538/kL	
Water consumption charge	Above 600 L /day - State Government bulk water charge - Unitywater charge		**pre 30/6/2013** $ 1.610/kL $ 1.036/kL	
Water consumption charge	**For water meter readings after 30 June 2013**			
Water consumption charge	Consumption for water consumed since the previous meter reading, for Unitywater reading after 30/06/2013. For the first 600 L /day - State Government bulk water charge - Unitywater charge		**after 30/6/2013** $ 1.855/kL $ 0.554/kL	 15% 3%
Water consumption charge	Above 600 L /day - State Government bulk water charge - Unitywater charge		**after 30/6/2013** $ 1.855/kL $ 1.067/kL	 15% 3%
Water charge	Dialysis and other medical conditions – allowance as set by Unitywater	0.00	N/A	

SUNSHINE COAST REGION SEWERAGE RESIDENTIAL				
Residential properties	A single charge has been adopted by Unitywater as the method of determining indicative usage of the sewerage collection/treatment and disposal system.			
Residential properties	Sewerage base charge – per dwelling and/or unit	570.80	$588.00	3%
Residential properties	Sewerage base charge – unconnected (per each lot)	547.00	$563.00	3%
Residential properties	Sewerage base charge – not connected (per dwelling unit)	570.80	$588.00	3%
Residential properties	Where residential lots are registered pursuant to the Body Corporate and Community Management Act, 1997 and where sewerage is installed to the common area, a sewerage base charge will be levied for each sewerage installation and apportioned to each lot in accordance with the contribution schedule, or levied by arrangement through the Body Corporate – each pedestal.	570.80	$588.00	3%

SUNSHINE COAST REGION SEWERAGE NON-RESIDENTIAL SOUTHERN AREA				
Non-residential properties – southern area	Different charges for different types of non-residential properties have been adopted by Unitywater as the method of determining indicative usage of the sewage collection/treatment and disposal system.			
Non-residential properties – southern area	Buildings and uses not otherwise specified – first pedestal	607.08	$625.00	3%
Non-residential properties – southern area	Buildings and uses not otherwise specified – additional pedestals	454.80	$468.00	3%
Non-residential properties – southern area	Buildings and uses not otherwise specified – urinals (per .5 metre)	152.28	$157.00	3%
Non-residential properties – southern area	Buildings and uses not otherwise specified – disposal point	304.56	$314.00	3%
Non-residential properties – southern area	Buildings and uses not otherwise specified – backwash permit	666.12	$686.00	3%
Non-residential properties – southern area	Clubhouse serviced by adjacent public toilets	304.56	$314.00	3%
Non-residential properties – southern area	Communal effluent disposal – residential	454.80	$468.00	3%
Non-residential properties – southern area	Communal effluent disposal – vacant	423.72	$436.00	3%
Non-residential properties – southern area	Exempt properties (SES, vacant adjoining allotments less than 177m2 and non-chargeable uses)	0.00	N/A	
Non-residential properties – southern area	For each strata titled unit where the sewerage facilities are located on the common property	304.56	$314.00	3%
Non-residential properties – southern area	Hooper Lodge – double units	454.80	$468.00	3%
Non-residential properties – southern area	Hooper Lodge – single units	304.56	$314.00	3%
Non-residential properties – southern area	Land declared to be of such a nature to require special consideration	304.56	$314.00	3%
Non-residential properties – southern area	Miscellaneous improvement	607.08	$625.00	3%
Non-residential properties – southern area	Schools and hospitals – first pedestal	607.08	$625.00	3%
Non-residential properties – southern area	Schools and hospitals – additional pedestals	454.76	$468.00	3%
Non-residential properties – southern area	Schools and hospitals – urinal (each .5m)	304.56	$314.00	3%
Non-residential properties – southern area	Schools and hospitals – disposal point	304.56	$314.00	3%
Non-residential properties – southern area	Selected community organisations – first pedestal	607.08	$625.00	3%
Non-residential properties – southern area	Selected community organisations – additional pedestals	454.80	$468.00	3%
Non-residential properties – southern area	Selected community organisations – urinal (each .5m)	152.28	$157.00	3%
Non-residential properties – southern area	Storerooms and other uses not requiring sewerage facilities	547.00	$563.00	3%

SUNSHINE COAST REGION SEWERAGE NON-RESIDENTIAL CENTRAL AREA				
Non-residential properties – central area	Non-residential properties – central area – charging is based on three separate categories in accordance with Unitywater's Sewerage Pricing Policy and Sewage Discharge Factor Policy, as applies to the former Maroochy Shire Council area: - a base charge is levied for access to the wastewater reticulation and treatment network. This charge is multiplied by the applicable Discharge Factor as per Unitywater's Sewerage Pricing Policy and Sewage Discharge Factor Policy; - a volume charge is applied to calculated sewage discharges. This charge is multiplied by the applicable Discharge Factor as per Unitywater's Sewerage Pricing Policy and Sewage Discharge Factor Policy; - a sewage strength charge			
Non-residential properties – central area – base charge	Units as defined under the Body Corporate and Community Management Act 1997 where the complex has a main meter and individual units do not have an individual meter. Charge per unit	420.60	$433.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 20-25mm	420.60	$433.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 32mm	1074.32	$1,107.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 40mm	1678.32	$1,729.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 50mm	2622.08	$2,701.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 80mm	6711.20	$6,913.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 100mm	10485.32	$10,800.00	3%
Non-residential properties – central area – base charge	Base charge – water meter – 150mm	23591.76	$24,300.00	3%
Non-residential properties – central area – base charge	Base charges to be multiplied by the applicable discharge factor as per Unitywater's Sewerage Pricing Policy and Sewage Discharge Factor Policy			
Non-residential properties – central area – volume charge	The sewage volume charge is charged in arrears and is derived from the amount of water consumed by a non-residential property, multiplied by the non-residential property's discharge factor.			
Non-residential properties – central area – volume charge	For water meter readings prior to 30 June 2013 volumetric charge for each kilolitre of water consumed.		**pre 30/6/2013** $ 2.662/kL	
Non-residential properties – central area – volume charge	For water meter readings after 30 June 2013 volumetric charge for each kilolitre of water consumed.		**after 30/6/2013** $ 2.742/kL	3%
Non-residential properties – central area – volume charge	The Sewage Strength Charge is in addition to the base and volumetric chares, non-residential properties are subject to an additional high strength charge levied on those non-residential properties that discharge in excess of domestic strength wastewater.			
Non-residential properties – central area – strength charge	Chemical oxygen demand >600mg/l	$0.72/kg	$0.74/kg	3%
Non-residential properties – central area – strength charge	Suspended solids >300mg/l	$1.14/kg	$1.17/kg	3%
Non-residential properties – central area – strength charge	Total nitrogen >80mg/l	$1.81/kg	$1.86/kg	3%
Non-residential properties – central area – strength charge	Total phosphorous >15mg/l	$5.16/kg	$5.31/kg	3%

SUNSHINE COAST REGION SEWERAGE NON RESIDENTIAL NORTHERN AREA				
Non-residential properties – northern area	Different charges for different types of non-residential properties have been adopted by Unitywater as the method of determining indicative usage of the sewage collection/treatment and disposal system.			
Non-residential properties – northern area	Commercial or industrial premises – first pedestal	645.40	$665.00	3%
Non-residential properties – northern area	Commercial or industrial premises – second pedestal	645.40	$665.00	3%
Non-residential properties – northern area	Commercial or industrial premises – third and each subsequent	568.76	$586.00	3%
Non-residential properties – northern area	Retirement villages – dwellings with two or more bedrooms (each lot)	568.76	$586.00	3%
Non-residential properties – northern area	Retirement villages – one bedroom dwelling (each lot)	529.36	$545.00	3%
Non-residential properties – northern area	Child care centres/kindergartens – per infant pedestal	426.80	$440.00	3%
Non-residential properties – northern area	All other non-residential use – first pedestal	645.40	$665.00	3%
Non-residential properties – northern area	All other non-residential use – second pedestal	645.40	$665.00	3%
Non-residential properties – northern area	All other non-residential use – third and each subsequent pedestal	568.76	$586.00	3%
Non-residential properties – northern area	Urinals – each 2m length or part thereof	568.76	$586.00	3%
Non-residential properties – northern area	Each parcel of land contained within the Tewantin Sports complex – charge per pedestal (common effluent line)	645.40	$665.00	3%
Non-residential properties – northern area	Each parcel of land contained within the Cooroy, Lake MacDonald and Lake Cootharaba Septic Effluent Schemes, charge per pedestal	480.68	$495.00	3%
Additional sewerage charge – northern area	As a partial contribution towards the full cost of Unitywater providing a sewerage service comprising headworks, works external and reticulation, an additional sewerage charge of $219.00 per annum be levied on all lots, including vacant, on which no sewerage charges, except charges for septic effluent schemes, have been levied on the subject land as at 1 July 1994, as they did not form part of a previous Noosa Shire council sewerage scheme as at that date, and on which sewerage headwork's charges have not been paid pursuant to Noosa Shire Council's policy, first adopted on 19 May 1987. Such additional charge shall apply for a period of ten years from the date that the service is made available and the charge shall be adjusted annually in line with the non-residential building construction index for	$212.38/yr for ten years	$ 219.00/yr for ten years	3%

Trade waste

Trade Waste Strength Pricing				
Fee Description	**2012/13 Total Fee**	**Unit**	**2013/14 Total Fee**	**% change**
Quality / Quantity Charges - BOD5	$1.96	per kilogram	$2.02	3%
Quality / Quantity Charges - Suspended solids per kg	$1.14	per kilogram	$1.17	3%
Quality / Quantity Charges - Sulphate	$1.03	per kilogram	$1.06	3%
Quality / Quantity Charges - Chemical oxygen demand per kg	$0.72	per kilogram	$0.75	4%
Quality / Quantity Charges - Total Nitrogen (or TKN) per kg	$1.81	per kilogram	$1.86	3%
Quality / Quantity Charges - Total Phosphorous per kg	$5.16	per kilogram	$5.32	3%
Quality / Quantity Charges - Total Dissolved Salts	$1.29	per kilogram	$1.33	3%
Quality / Quantity Charges - Total Oil & Grease per kg	$1.14	per kilogram	$1.17	3%

Trade Waste Volumetric Pricing					
12-13 Description	**2012/13 Total Fee**	**13-14 Description**	**Unit**	**2013/14 Total Fee**	% change
1. Trade Waste Volumetric Fee - Caboolture	$1.85	Trade Waste Volumetic Fee Category1 & Category 2 (Category 2 will be subject to a strength charge)	per kilolitre	$2.00	8%
1. Trade Waste Volumetric Fee - Pine	$2.20				-9%
2. Trade Waste Volumetric Fee - Pine	$2.20				-9%
2. Category 2 & 3 Volumetric Fee - Noosa and Caloundra	$0.90				122%
2. Quality / Quantity Charges - Sewerage quantity charge per kL (as per waste water charge)	$2.20				-9%
3. Trade Waste Volumetric Fee Pine Category 1 < 30	$96.00	Trade Waste Volumetric Fee Category 1 < 50kl (Only applies to trade waste customers without a sewerage meter)	per annum	$100.00	4%
3. Category 1A (Volume less than 50kL/annum) Volumetric Fee	$110.00				-9%
3. Category 1 Volumetric Fee Noosa	$110.00				-9%
3. Category 1 Volumetric Fee Noosa	$42.00				138%
4. Category 1 (Volume greater than 50kL/annum, but less than 250kL/annum) Volumetric Fee	$440.00	Trade Waste Volumetric Fee Category 1 > 50 kl < 250 kl (Only applies to trade waste customers without a sewerage meter)	per annum	$300.00	68%
		Trade Waste Volumetric Fee Category 1 > 250 kl (Only applies to trade waste customers without a sewerage meter)	per annum	$750.00	170%
6. Quality / Quantity Charges - Landfill Leachate per kL	$2.20	Quality / Quantity Charges - Landfill Leachate per kL	per kilolitre	$2.25	2%
7. Quality / Quantity Charges - Tankered Domestic Sewerage per kL	$2.20	Quality / Quantity Charges - Tankered Domestic Sewerage per kL	per kilolitre	$2.25	2%
8. Quality / Quantity Charges - Tankered Non Domestic Sewerage per kL	$11.00	Quality / Quantity Charges - Tankered Non Domestic Sewerage per kL	per kilolitre	$11.50	5%
9. Quality / Quantity Charges - Chemical toilets per kL	$20.00	Quality / Quantity Charges - Chemical toilets per kL	per kilolitre	$21.00	5%
10. Quality / Quantity Charges - Septic tank / On Site Waste Treatment systems per kL	$36.00	Quality / Quantity Charges - Septic tank / On Site Waste Treatment systems per kL	per kilolitre	$37.50	4%
11. Tankered Liquid Trade Waste	$52.00	Tankered Liquid Trade Waste	per kilolitre	$54.00	4%

Fee Description	2012/13 Total Fee	Unit	2013/14 Total Fee	% change
Application for Trade Waste Permit	$325.00	per application	$335.00	3%
Renewal Fee for Trade Waste Permit	$100.00	per annum	$103.00	3%
Trade Waste Licence Application Fee - Category 3 Legal Agreement	POA	per agreement	POA	
Plan Verification, Assessment, Inspection and Testing	$70.00	per hour	$72.00	3%
Trade Waste - Trade Waste Search (property and/or business) 1.5 Hours	$180.00	per application	$185.00	3%
Trade Waste - Change of Permit details	$100.00	per application	$103.00	3%
Trade Waste - Food Waste Disposal Units & Vegetable Peelers Category A < 400 watts rated power	$600.00	per annum	$620.00	3%
Trade Waste Fee - Food Waste Disposal Units & Vegetable Peelers Category B 400 - 600 watts rated power	$2,700.00	per annum	$2,780.00	3%
Trade Waste - Food Waste Disposal Units & Vegetable Peelers Category C > 600 watts rated power	$5,300.00	per annum	$5,460.00	3%
Inadequately Sized Arrestor (High Impact)	$950.00	per annum	$980.00	3%
Inadequately Sized Arrestor (Medium Impact)	$500.00	per annum	$515.00	3%
Inadequately Sized Arrestor (Low Impact)	$350.00	per annum	$360.00	3%
Garbage Grinders - Up to 0.4 Kw/h	$600.00	per annum	$620.00	3%
Garbage Grinders - Between 0.4 and 0.6 Kw/h	$2,700.00	per annum	$2,780.00	3%
Garbage Grinders - Over 0.6 Kw/h	$5,300.00	per annum	$5,460.00	3%
Trade Waste Fee - Review Cleaning / Pump-out Frequency of Treatment Devices	$72.00	per hour	$75.00	4%

Recycled water

Recycled Water Fees & Charges					
12-13 Description	**2012/13 Total Fee**	**13-14 Description**	**Unit**	**2013/14 Total Fee**	% change
1. Recycled Water through Residential Dual Reticualtion	$1.00	Recycled Water through Residential Dual Reticualtion	per kilolitre	$1.30	30%
2. Class A and A+ Unitywater Owned Reticulation	$1.00	Class A and A+ Unitywater Owned Reticulation	per kilolitre	$1.30	30%
3. Class A and A+ Customer Owned Reticulation	$0.40	Class A and A+ Customer Owned Reticulation or Supplied to Tankers	per kilolitre	$0.60	50%
3. Class A and A+ Supplied to Tankers	$0.40				50%
4. Class B Unitywater Owned Reticulation	$0.20	Class B Unitywater Owned Reticulation	per kilolitre	$0.65	225%
5. Class B Customer Owned Reticulation	$0.14	Class B Customer Owned Reticulation or Supplied to Tankers	per kilolitre	$0.30	114%
5. Class B Supplied to Tankers	$0.30				0%
6. Provision of Bulk Recycled Water to Redcliffe Golf Club	$685.00	Provision of Bulk Recycled Water to Redcliffe Golf Club	per annum	$700.00	2%
7. Permit for Access to Bulk Recycled Water Outlets	$120.00	Permit for Access to Bulk Recycled Water Outlets	per annum	$124.00	3%
8. Recycled Water Safety stickers	$4.00	Recycled Water Stickers	per sticker	$7.00	75%
8. Recycled Water Stickers (Small)	$7.00				0%
8. Recycled Water Stickers (Large)	$10.00				-30%
9. Recycled Water Logbook Fee	$14.00	Recycled Water Logbook Fee	per logbook	$14.50	4%
10 Bulk Recycled Water Standpipe Access Key Deposit	$160.00	Bulk Recycled Water Standpipe Access Key Deposit	per key	$165.00	3%

Selected sundry charges

		Other Water & Sewerage Charges 2013-14			
12-13 Description	**2012/13 Total Fee**	**13-14 Description**	**Unit**	**2013/14 Total Fee**	**% change**
1. Pressure and flow inspection test	$110.00	Pressure and flow inspection test	per inspection	$120.00	9%
2. Domestic Water Meter Replacement, Calibration and Strip Meters (refundable if meter faulty)	Price on Application	Domestic Water Meter Replacement, Calibration and Strip Meters (refundable if meter faulty)	per water meter	$350.00	
3. Installation of Lockable Ball Valve for Water Meter	$100.00	Installation of Lockable Ball Valve for Water Meter	per water meter	$120.00	20%
4. Raise or Lower Water Meter Box (Below Ground Meter Installations Only)	$90.00	Raise or Lower Water Meter Box (Below Ground Meter Installations Only)	per water meter	$120.00	33%
5. Water Meter Relocation Fee	Price on Application	Water Meter Relocation Fee < 1m	per water meter	$300.00	
		Water Meter Relocation Fee > 1m	per water meter	$800.00	
6. Fee to Convert an Above Ground 20mm Meter to a Below Ground 20mm Meter	$250.00	Fee to Convert an Above Ground 20mm Meter to a Below Ground 20mm Meter	per water meter	$340.00	36%
7. Location of Water Meter	$120.00	Location of a Water Meter	per water meter	$80.00	-33%
8. Excavating and locating existing connection by Unitywater Services on site	$470.00	Excavating and locating existing connection by Unitywater Services on site	each	$450.00	-4%
9. Recycled Water Cross Connection Inspection	$120.00	Recycled Water Cross Connection Inspection	per inspection	$120.00	0%
10. Administration Charge for Fees Refund - water connections	$70.00	Administration Charge for Fees Refund - water connections	per refund	$70.00	0%
11. Water Supply - New metered service connection - 20mm - where pre tapped service pipe exists	$300.00	Water Supply - New metered service connection - 20mm	per connection	$700.00	133%
11. Water Supply - New metered service connection - 20mm - where no pre tapped service pipe exists	$1,100.00				-36%
11. Connection Fee for 20mm diameter Water Service (where service pipe exists)	$420.00				67%
11. Connection Fee for 20mm diameter Water Service and Meter	$800.00				-13%
12. Connection Fee for 20mm diameter Water Service Pipe Only	$500.00	Connection Fee for 20mm diameter Water Service Pipe Only	per connection	$520.00	4%
13. Upgrade existing 12mm to 20mm service	Price on Application	Upgrade existing 12mm to 20mm service	Per upgrade	$800.00	
14. Connection Fee for 25mm diameter Water Service and Meter	$930.00	Water Supply - New metered service connection - 25mm	per connection	$1,000.00	8%
14. Water Supply - New metered service connection - 25 mm	$1,300.00				-23%
15. Connection Fee for greater than 25mm diameter Water Service and Meter	Price on Application	Connection Fee for greater than 25mm diameter Water Service and Meter	per connection	Price on Application	
16. Connection Fee for Fire Services	Price on Application	Connection Fee for Fire Services	per connection	Price on Application	
17. Water meter charge applying to community titled properties (excluding installation) per unit - Price per hour for on-site inspection including those required by 3rd party	$110.00	Water meter charge applying to community titled properties (excluding installation) per unit - Price per hour for on-site inspection including those required by 3rd party	per hour	$120.00	9%
18. Water Service Disconnection - Up to 25mm	$340.00	Water Service Disconnection - Up to 25mm	per meter	$360.00	6%
19. Water Service Disconnection - Larger than 25mm	Price on Application	Water Service Disconnection - Larger than 25mm	per meter	Price on Application	
20. Installation of new sewerage network connection	Price on Application	Installation of new sewerage network connection	per connection	Price on Application	
21. Standard connection charge (locate and mark position of existing junction)	$80.00	Standard connection charge (locate and mark position of existing junction)	each	$85.00	6%
22. Raising/Lowering of Sewer Manholes on Private Property	Price on Application	Raising/Lowering of Sewer Manholes on Private Property	per manhole	Price on Application	
23. Special Sewerage Connection Fee - Godwin Beach, Beachmere Road Industrial Area and Donnybrook	$465.00	Special Sewerage Connection Fee - Godwin Beach, Beachmere Road Industrial Area and Donnybrook	per connection	$480.00	3%
24. Closed Circuit Television (CCTV) Survey of Sewer Length Related to Construction Adjacent to Sewer	$500.00	Closed Circuit Television (CCTV) Survey of Sewer Length Related to Construction Adjacent to Sewer	per application	$520.00	4%
25. Clearing Blocked Drains (After Hours) - 4 hours minimum	$200.00	Clearing Blocked Drains (After Hours) - 4 hours minimum	per hour	$220.00	10%
26. Clearing Blocked Drains (Normal Hours) - 2 hours minimum	$160.00	Clearing Blocked Drains (Normal Hours) - 2 hours minimum	per hour	$170.00	6%
27. Sewerage Disconnection	Price on Application	Sewerage Disconnection	per application	Price on Application	
28. Sewer and Water Services Search (Unimproved Land)	$60.00	Sewer and Water Services Search (Unimproved Land)	per application	$65.00	8%
29. Sewer and Water Services Search (Developed Land)	$120.00	Sewer and Water Services Search (Developed Land)	per application	$130.00	8%

APPENDIX C RESIDENTIAL BILL CALCULATIONS

	Unitywater (200.75kl/yr)			*QCA (200kl/yr)*		
	2012-13	*2013-14*	*%*	*2012-13*	*2013-14*	*%*
Caboolture						
Retail water access	346.00	293.56	-15.2%	346.00	293.56	-15.2%
Retail water use	35.33	129.28	265.9%	35.20	128.80	265.9%
Retail sewerage access	744.88	695.24	-6.7%	744.88	695.24	-6.7%
Retail sewerage use	na	116.35	-	na	115.92	-
Council rebate	excluded	excluded	-	-140.00	0	-
Bulk water	440.04	489.23	11.2%	438.40	487.40	11.2%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**1,566.26**	**1,723.67**	**10.1%**	**1,344.48**	**1,720.92**	**28.0%**
Pine Rivers						
Retail water access	346.00	293.56	-15.2%	346.00	293.56	-15.2%
Retail water use	35.33	129.28	265.9%	35.20	128.80	265.9%
Retail sewerage access	744.88	695.24	-6.7%	744.88	695.24	-6.7%
Retail sewerage use	na	116.35	-	na	115.92	-
Council rebate	excluded	excluded	-	-111.12	0	-
Bulk water	440.04	489.23	11.2%	438.40	487.40	11.2%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**1,566.26**	**1,723.67**	**10.1%**	**1,373.36**	**1,720.92**	**25.3%**
Redcliffe						
Retail water access	346.00	293.56	-15.2%	346.00	293.56	-15.2%
Retail water use	35.33	129.28	265.9%	35.20	128.80	265.9%
Retail sewerage access	744.88	695.24	-6.7%	744.88	695.24	-6.7%
Retail sewerage use	na	116.35	-	na	115.92	-
Council rebate	excluded	excluded	-	-244.72	0	-
Bulk water	440.04	489.23	11.2%	438.40	487.40	11.2%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**1,566.26**	**1,723.67**	**10.1%**	**1,239.76**	**1,720.92**	**38.8%**

	Unitywater (209.145kl/yr)			*QCA (200kl/yr)*		
	2012-13	*2013-14*	*%*	*2012-13*	*2013-14*	*%*
Sunshine Coast						
Retail water access	232.04	231.76	-0.1%	232.04	231.76	-0.1%
Retail water use	112.52	134.69	19.7%	107.60	128.80	19.7%

	Unitywater (200.75kl/yr)			*QCA (200kl/yr)*		
Retail sewerage access	570.80	509.84	-10.7%	570.80	509.84	-10.7%
Retail sewerage use	na	121.22	-	na	121.22	-
Council rebate	no rebate	no rebate	-	no rebate	no rebate	-
Bulk water	336.72	387.96	15.2%	322.00	371	15.2%
Bulk water rebate	excluded	excluded	-	-80.00	0	-
Total Bill	**$1,252.08**	**$1,385.47**	**10.7%**	**$1,152.44**	**$1,357.32**	**17.8%**

GLOSSARY OF ACRONYMS, TERMS AND CONDITIONS

A	
ASC	Asset Steering Committee
B	
C	
CAMS	Consolidated Asset Management System
CPI	Consumer Price Index
CWPM	Capital Works Planning Manual
D	
DEHP	Department of Environment and Heritage Protection
Design and Construction Code	SEQ Water Supply and Sewerage Design and Construction Code
DEWS	Department of Energy and Water Supply
DSDIP	Department of State Development, Infrastructure and Planning
DR Act	*South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* (Qld)
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	
GCCC	Gold Coast City Council
H	
I	
IWA	International Water Association
J	
K	
kl	Kilolitre
km	Kilometres
L	
l/c/d	Litres per connection per day
l/day	Litres per day
LCC	Logan City Council

l/p/d	Litres per person per day
M	
m	Million
MAR	Maximum Allowable Revenue
MBRC	Moreton Bay Regional Council
N	
NPV	Net Present Value
NSC	Northern Service Centre
NWC	National Water Commission
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
RCC	Redland City Council
S	
SCADA	Supervisory Control and Data Acquisition
SCRC	Sunshine Coast Regional Council
SEQ	South East Queensland
SEQ Regional Plan	*South East Queensland Regional Plan 2009-2031*
STP	Sewage Treatment Plant
T	
TWCM	Total Water Cycle Management
U	
V	
W	
WACC	Weighted Average Cost of Capital
WSAA	Water Services Association of Australia

X

Y

Z

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