

Final Report

SEQ Retail Water Long-Term Regulatory Framework – Overview – Part A

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We wish to acknowledge the contribution of the following staff to this report:

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EXECUTIVE SUMMARY

Introduction

The QCA was directed to investigate and report on a regulatory framework for the five SEQ distributor-retailer entities (the retailers). The retailers are Unitywater, Queensland Urban Utilities (QUU), and the Logan, Redland and Gold Coast City Councils.

The framework must protect the long-term interests of users by ensuring prices reflect prudent and efficient costs and promote efficient investment having regard to service reliability, safety and security. The framework must minimise the administrative burden and facilitate a more light-handed framework.

Past price monitoring by the QCA has found no evidence of an exercise of market power by the retailers. Concerns about Redland City Council's (Redland Water's) approach and pricing model meant we were unable to establish whether there was an exercise of market power over 2013-15.

This Final Report is in three parts. Part A provides an overview of the recommendations. Part B provides details of the recommended regulatory framework. Part C sets out the recommended pricing principles. Details about the weighted average cost of capital and the retailers' transition to the recommended framework are in appendices.

Key recommendations

Annual performance monitoring is recommended for the long term. Subject to acceptance by Ministers and receipt by the QCA of a direction notice, it would apply from 1 July 2015. It would focus on the key elements of performance - prices (and costs where relevant), customer engagement, strategic investment and service quality. Retailers would continue to set prices and service quality standards. The QCA would collect information from retailers and monitor and report on their performance in an independent and transparent manner.

The recommended pricing principles draw on national agreements and regulatory precedents, and are capable of being applied in a range of circumstances. Retailers would report on their application of the pricing principles, and identify and explain any departures. Reported indicators would focus upon changes in prices, costs and service quality to establish whether there is an exercise of market power.

The framework provides incentives for retailers to improve long-term performance and reduces their administrative burden compared to previous price monitoring. Increasing levels of detail would only be required where performance against CPI-X (where X is considered an achievable improvement in efficiency) or other elements of the framework indicates a risk that the retailer is exercising market power. A cost of service review would be initiated by the QCA where it considers there is sufficient evidence of a potential exercise of market power which cannot be justified by the retailer.

Should then evidence of an exercise of market power be confirmed, and the retailer does not address the issue, as a last resort the QCA may seek to set prices, subject to Ministerial direction. This would require amendments to the *Queensland Competition Authority Act 1997* (the QCA Act).

Retailers would report annually on their performance for the previous year, with information returns due by 31 October each year. For certainty, retailers would also be able to seek rulings on the appropriateness of cost increases in advance of them setting prices. A draft report for comment would be prepared and a final report that takes all comments into account would be published by 31 March of the following year.

In the light of their past performance, Unitywater, QUU, Logan and Gold Coast City Councils should immediately transition to annual performance monitoring from 2015. Redland City Council should address the QCA's concerns prior to the first year of annual performance monitoring.

1 OVERVIEW

1.1 Ministers' Direction

The Ministers (the Treasurer and Minister for Trade, and Attorney-General and Minister for Justice) directed (**Appendix A**) the QCA to investigate and report on a long-term regulatory framework for the five SEQ distributor-retailers (the retailers). The retailers are Unitywater and Queensland Urban Utilities (QUU), and Logan, Redland and Gold Coast City Councils. If accepted the framework would apply from 1 July 2015, subject to the QCA receiving a direction notice from the QCA's Minister.

The overarching regulatory objective is to protect the long-term interests of the users of SEQ water and sewerage services by ensuring that the prices of these services reflect prudent and efficient costs, while promoting efficient investment in and the use of these services, having regard to the reliability, safety and security over the long term.

The form of prices oversight is required to minimise the administrative burden on the retailers and facilitate a move to a more light-handed framework over time.

1.2 Background

SEQ retailers have been subject to different forms of price monitoring since 2008. During 2010-13 the QCA annually reviewed the costs of water and sewerage services, monitored changes in prices and compared the retailers' revenues against the maximum allowable revenue (MAR). The MAR reflects the QCA's assessment of the retailers' total prudent and efficient costs.

The QCA undertook a more detailed review of the five retailers' prices and costs for the 2013-15 period with a final report released on 31 March 2014. Unitywater, QUU, Logan Water and Gold Coast Water's revenues lay below the QCA's MAR. As a result, the QCA found no evidence of an exercise of monopoly power in 2013–15.

For Redland Water, 2013-15 revenues exceed MAR. In part, this resulted from its approach to smoothing prices over 10 years, whereby over-recovery in earlier years is returned to users in under-recovery in later years. The QCA had concerns with the 10-year model applied by Redland Water and negative retail-distribution prices in future years. The QCA was therefore unable to establish whether Redland Water is exercising its monopoly power.

1.3 Long-term regulatory framework

The QCA has undertaken a consultative process in developing the light-handed regulatory framework. This included the release of position papers on the long-term regulatory framework, the pricing principles, and the cost of capital as well as a technical paper on implementation issues. The QCA also held workshops on these matters with the key stakeholders. All submissions have been taken into account.

1.3.1 Price monitoring

While the QCA found no evidence of an exercise of market power for 2010-15, the QCA concluded that the retailers' costs could be reduced by \$211.85 million over that period. These potential savings were identified despite ongoing improvements in retailers' policies and

procedures and efforts to reduce costs. These savings will be reflected in lower customer prices.

To ensure the potential savings are secured in the future and passed through to customers, continued prices oversight is considered necessary. Further improvements in performance are possible as past price monitoring did not consider pricing practices (including tariff structures), customer engagement practices or service quality. As noted by a consumer representative (QCOSS 2014), economic regulation is essential in the SEQ water market, given the very limited competitive forces apparent.

Nevertheless, some retailers argued that electoral pressure is sufficient to ensure appropriate services are provided at lower cost, noting also that most retailers have under-recovered efficient costs. Such pressure, however, can be effective to some extent but is typically short-term in nature and typically focuses on prices - while service quality can deteriorate. Water issues and pricing are often very technical and customers are not knowledgeable or resourced to acquire the necessary knowledge to hold water businesses to account (QCOSS 2014). Prices oversight can provide a longer-term and more transparent and informative environment with a continuous focus on performance - particularly when complemented by effective customer engagement.

1.3.2 Form of regulation

The recommended form of light-handed regulatory framework is annual performance monitoring.

Under annual performance monitoring, retailers continue to set prices and make investment decisions. The form of oversight varies with levels of concerns about retailers' risk of exercising their market power. Differences in oversight are manifest in the degree of review by the QCA and the information required from retailers. This ensures the administrative burden is proportionate to particular concerns.

The QCA would monitor and report on the key elements of retailers' performance: prices (and costs where appropriate), customer engagement, strategic investment and service quality.

Much of this information is already reported by the retailers, although in a variety of places. It is not, however, independently and transparently reviewed and analysed.

1.3.3 Incentives for performance

Public reporting and independent transparent annual review and analysis by the QCA should improve retailers' performance and protect the long-term interests of the users of SEQ water and sewerage services. At the same time, to ensure efficient investment, financial sustainability and their delivery capability, retailers would have the opportunity to justify changes in costs and therefore prices which exceed a threshold level.

The threshold level is based on previous reviews (including in other jurisdictions). It is measured by inflation (CPI) less X, where X represents further improvements in efficiency considered achievable.

Retailers would have an incentive to manage their activities, and particularly prices, costs, and service quality, to ensure that prices do not exceed CPI-X. In doing so, retailers could minimise regulatory intervention and associated costs. Increasing levels of information would be required where performance against CPI-X or other elements of the framework indicates that there is a risk of an exercise of market power.

Retailers would also have the incentive to outperform CPI-X by sharing in the gains.

Where there is sufficient evidence of a potential exercise of market power which cannot be justified by the retailer, a cost of service review would be initiated by the QCA.

Where a cost of service review confirms that there is an exercise of market power, the QCA may seek to set prices, by application to the Minister. Deterministic powers are applied in other jurisdictions and have been recommended by the Commission of Audit (2013). Such a power would require legislative amendment to the QCA Act.

1.3.4 CPI and X

Where prices exceed CPI-X, retailers would be required to justify the differences and provide supporting information.

The CPI measure to be used by the QCA in assessing prices would be the Reserve Bank of Australia forecast available at the time of retailers' pricing decisions. This may be the mid-point of a forecast range.

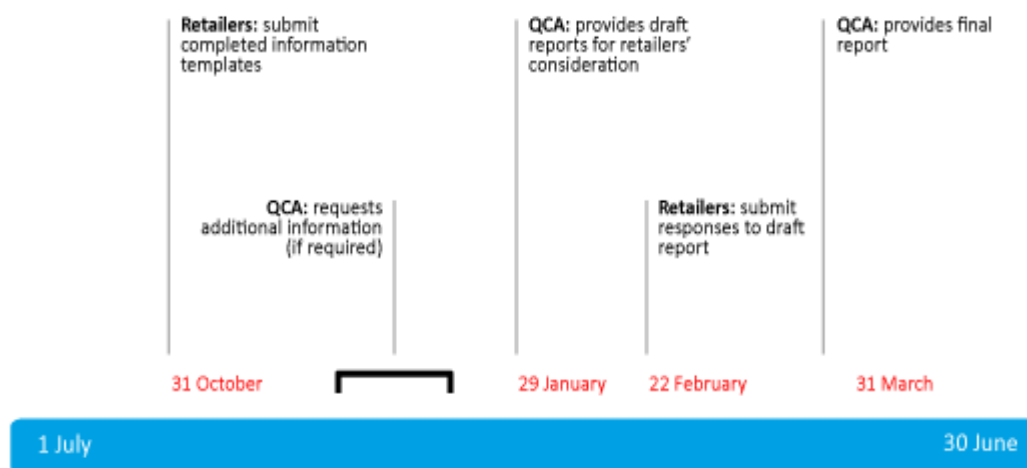
Based on an analysis of retailers' past performance and efficiency targets set in other regulatory jurisdictions, an X-factor of 0.25% of MAR would be applied to SEQ retailers. The X-factor would be subject to review in five years or earlier if circumstances warrant.

1.3.5 Timing and length of regulatory periods

Retailers would report annually on their performance for the previous financial year. Information returns would be due by 31 October. A final report by the QCA would be due by 31 March the following year. Reporting timelines are outlined in Figure 1.

For regulatory certainty, retailers would be allowed to seek approval, at a time of their discretion, for material changes in costs prior to incurring costs. Any ruling by the QCA would be binding on any future reviews unless supporting information is later found to be misleading.

Figure 1 Reporting timelines



1.3.6 Unders and overs mechanism

An unders and overs mechanism is recommended to assist retailers in managing any shortfalls or surpluses in revenues over time. To be eligible for pass through, costs must be efficient and uncontrollable by the retailer. They could include those following on from government legislation, bulk water charges, market-driven changes in weighted average cost of capital (WACC), or demand. They could also be passed through if they have been substantiated by a retailer prior to the reporting period.

Prior under-recoveries (that is the difference between the MAR and actual revenues for 2013-14 and 2014-15) may be recouped on a net present value (NPV)-neutral basis for a period of up to 10 years. Retailers could apply to the QCA to allow any remaining under-recovery to be carried forward to later years.

1.3.7 Triggers for cost of service reviews

Consistent with most other jurisdictions, specific quantitative triggers or performance criteria for a cost of service review are not pre-defined. It is not possible to establish comprehensive tests for the wide range of possible circumstances. Moreover, the QCA seeks to promote a retailer culture that focuses on the long-term interests of users and investment in affordable services, rather than compliance with pre-determined trigger thresholds.

Broad guidance on scenarios which could trigger a review is provided in Part B. A retailer's performance in passing on cost savings, customer engagement, long-term strategic investment planning practices and implementing pricing principles may also influence a decision to trigger a review. The QCA would seek to provide further details in a guidance paper in response to any specific concerns identified by retailers.

Before a cost of service review is initiated, retailers would be given an opportunity to explain in more detail the reasons for poor performance.

1.3.8 Benefits and costs of regulation

Under the previous regulatory framework, the benefits of regulation were assessed as \$211.85 million in total cost savings over 2010-15. These benefits will be reflected in lower customer prices.

Under the proposed regulatory framework, further efficiency gains should be achievable as a result of the inherent incentives and greater focus upon the various elements of the framework.

The QCA's average costs for the 2010–15 price monitoring investigations are estimated at \$585,000 per retailer per investigation. For annual performance monitoring, the QCA's costs should decline to between \$100,000 and \$150,000 per retailer per year, depending upon the level of detail required as a result of retailers' performance.

Retailers indicated that the internal costs (regulatory staff, administration, consultancies) per retailer per year should decline from an average of \$640,000 to \$335,000 for annual performance monitoring. The range of internal costs estimated by retailers for annual performance monitoring is large and ranges from \$32,000 to \$600,000 (plus undefined overheads).

Costs per retailer per investigation (QCA costs as well as retailer costs) should decline from \$1.2 million to less than \$0.5 million. Therefore, annual performance monitoring should maintain the gains achieved to date and deliver further benefits at less than half the cost.

Because the QCA's cost is the same regardless of the size of the retailer a similar charge would apply to each retailer for a similar level of assessment.

1.3.9 Regulatory parameters

The MAR establishes the amount of revenue that an efficient business would need to remain commercially viable but not enjoy monopoly profits. The MAR comprises the key building blocks: return on capital (WACC applied to the regulatory asset base (RAB)); return of capital (depreciation); and efficient operating costs.

Where there are capital revenues (including gifted assets and infrastructure charges), alternative approaches are available. They need to avoid double-counting and reflect their purpose.

Under the recommended framework, the QCA would review retailers' changes in prices against a Reference MAR, based on costs reviewed for 2013-15 price monitoring. This would be reset over time in response to additional information. Were a cost of service review initiated the regulatory review processes such as those adopted for 2013-15 would again be adopted for assessing the prudence and efficiency of costs.

Depreciation would be calculated using straight-line depreciation with any departures justified by the retailers.

1.3.10 Treatment of WACC

The QCA recommends a WACC based on the following key principles and parameter estimates:

- (a) Officer WACC3 form of the discount rate
- (b) a risk-free rate based on the length of the regulatory period
- (c) a market risk premium (MRP) of 6.5%
- (d) a capital structure of 60% debt assuming a credit rating of BBB
- (e) an asset beta of 0.35, equivalent to a levered equity beta of 0.65
- (f) a benchmark cost of debt and a debt beta of 0.11
- (g) a gamma of 0.47.

The QCA is yet to reach a final position on the appropriate approach for setting the benchmark cost of debt (which includes consideration of the trailing average cost of debt).

1.3.11 Stakeholder engagement

Retailers have a wide range of stakeholders. These include government agencies, technical regulators, peak body groups and customers. To a large extent the relationship with these stakeholders would be determined by issues relevant to those stakeholders.

A primary focus of submissions and the QCA's analysis has been the appropriate nature and levels of customer engagement which would be one of the drivers of the effectiveness of annual performance monitoring.

The levels of customer engagement range from the provision of information to customers (such as media releases and fact sheets) to more structured consultation such as through the customer consultation committees. The underlying principles for effective customer engagement are that it should:

- (a) promote understanding of customers' needs and be representative and responsive of customers' views
- (b) be relevant, evidence based, open and transparent, timely, collaborative, and cost-effective.

Retailers should include a customer consultation committee as part of their customer engagement strategy.

1.3.12 Strategic approach to long-term investment

A strategic approach to long-term investment takes account of non-infrastructure investment and efficient demand-side management initiatives. It should also provide sufficient coordination with regulatory and regulatory review processes. To assist businesses to develop a whole-of-sector strategic approach to long-term investment, retailers should seek to ensure, and demonstrate, that they have:

- (a) undertaken effective strategic planning. Retailers should provide evidence of board/council approval and Ministerial endorsement of their relevant Water Netserv Plans
- (b) co-ordinated their annual plans with their strategic plans. Retailers should provide their annual capital works plans or annual performance plans
- (c) complied with asset management standards. Retailers should provide annually, details of their compliance with the asset management standard they have implemented
- (d) evaluated the efficiency of alternative long-term investments. Retailers should annually report on the project evaluation practices used for significant capex projects.

The legislative and regulatory planning requirements of council water businesses should be reviewed with a view to reducing any duplication with the requirements applied to the DRs.

1.3.13 Service quality

Service quality performance reporting complements the oversight of prices. Retailers could reduce service quality below optimal levels or may engage in over-servicing which results in higher prices. To avoid such outcomes, service quality performance reporting needs to reflect indicators that are relevant and meaningful to residential and non-residential customers, allow for comparisons between retailers, and not be onerous or costly to collect.

The Department of Energy and Water Supply (DEWS) has implemented a requirement for service providers to report against Key Performance Indicators (KPIs) as part of amendments to the *Water Supply (Safety and Reliability) Act 2008* (Water Supply Act). The QCA would focus on those indicators most relevant to ascertaining whether there is an exercise of market power.

Twenty indicators, including 18 DEWS KPIs, are considered relevant. All are already required under other obligations (for DEWS, NPR or the SEQ Customer Code). This ensures that the collection and reporting process is not onerous for the retailers, and that the costs of the process are minimised.

The QCA proposes to obtain the service quality indicators from the retailers' websites as the Water Supply Act requires service providers to complete reporting of their performance against the KPIs on or before 1 October each year and publish their performance against the KPIs as soon as practical thereafter.

1.3.14 Pricing principles

Under the Ministers' Direction, the regulatory framework must set out pricing principles to apply to water, sewerage, trade waste, recycled water services and stormwater reuse services. The QCA has not previously monitored the retailers' pricing practices.

The pricing of urban water and sewerage services should promote economic efficiency, ensure revenue adequacy, promote the public interest and be transparent, predictable, simple and cost effective to apply.

Prices should be forward-looking, cost reflective and set according to marginal cost, specifically long-run marginal cost (LRMC). In addition to these general pricing principles, there are specific principles which apply to the different services nominated in the Ministers' Direction.

A proposed guidance paper would include templates to assist retailers to calculate LRMC using available data.

The application of the recommended pricing principles needs to take into account the retailers' circumstances. That is, whether the principles should be applied depends upon a consideration of the benefits and costs of applying the principles, having regard to for example, their administrative feasibility, customer preferences, cost-effectiveness and fairness and equity.

For this purpose, retailers should seek to apply the pricing principles or advise of any departures and provide reasons and relevant supporting analysis. The QCA would then review and report publicly on retailers' assessment of the applicability of the recommended pricing principles and, if relevant, on progress in their application over time.

Key issues are:

- (a) For water services, a two-part tariff is preferred, with fixed charges to achieve revenue adequacy. Charges that differ by location or service quality may be appropriate and should have regard to administrative feasibility, customer preferences and cost-effectiveness.
- (b) For sewerage services, a single fixed charge is usually appropriate for residential services. Volumetric charges may be applied based on discharge or return factors by customer type.

To manage potential price shocks for customers, price paths should be implemented where substantial cost increases are anticipated having regard to customers' ability to pay and revenue impact on retailers.

1.3.15 Information requirements

Retailers are to self-assess the level of information to be reported to the QCA. Where for example changes in prices are below CPI-X, and other aspects of performance have improved, no cost data is required.

The drivers of existing retail price levels have been the subject of preceding price monitoring. However, where price increases exceed CPI-X, increased information requirements and reporting of cost data (together with effective customer engagement) should assist customers to understand the key drivers of annual price increases. Four information levels are discernible.

Level 1 - Price information requirements

To assess the annual change in each retail distribution price against CPI-X, an annual information return identifying increases in prices and components of prices would be required from retailers. Also required would be details of their application of pricing principles, customer engagement practices, strategic investment planning and asset management approaches, and report against 20 service quality indicators.

Level 2 - Revenue information requirements

If prices (or the components of prices) increase beyond CPI-X, further information would be required to enable the QCA to derive average prices for services. This includes details of revenues for water and sewerage activities, residential and non-residential.

If the increase was due to a tariff restructure, the QCA would require details of the nature of the impact on total revenues, and information (such as the nature of risks and costs) underpinning the reason for the change in the tariff structure.

Level 3 - Cost information requirements

Price increases exceeding CPI-X may be due to the pass-through of a limited number of cost categories. Details of changes in such costs, and of any unders and overs adjustments, would be submitted at this level.

Level 4 - Cost information requirements

Where prices or revenues have increased by more than CPI-X and reflect broad-based changes in costs, a wide range of cost data on all key parameters relevant to estimating the MAR would be required. This level of information differs from that required for a cost of service review as it does not require an assessment of the prudence and efficiency of costs.

1.4 Transition

Subject to acceptance by the Ministers and receipt by the QCA of a referral to implement the annual performance monitoring framework, the criteria for an immediate move to annual performance monitoring adopted are:

- (a) an absence of public interest or equity issues that may warrant regulatory review
- (b) that regulated services are clearly defined and separated from non-regulated services
- (c) evidence that market power is not being exercised
- (d) an absence of imminent material changes in circumstances or major infrastructure costs
- (e) a demonstrated capacity to provide information accurately and on time.

Performance in customer engagement, strategic planning for long-term investment, service quality and pricing principles has also been taken into account in assessing whether annual performance monitoring is appropriate.

The QCA assessed each retailer against these criteria and considers that Unitywater, QUU, Logan and Gold Coast City Councils should move to annual performance monitoring from 1 July 2015.

For Redland Water further details are required before the QCA can determine whether Redland Water should move to annual performance monitoring from 1 July 2015. Should the QCA have concerns about the potential exercise of market power or relevant details not be available by the first review under annual performance monitoring, the QCA may recommend to the Minister that a price determination is warranted. A cost of service review would not be necessary as the Redland's issues relate to prices rather than costs.

Over time, with increased experience, annual performance monitoring should become more effective and even more light-handed in terms of the resources required for its implementation.

2 RECOMMENDATIONS

2.1 Regulatory framework

The list of recommendations on the regulatory framework is in Table 1.

Table 1 Recommended regulatory framework

<i>Chapter</i>	<i>Topic</i>	<i>No</i>	<i>Recommendations</i>
The long-term regulatory framework	Approaches to economic regulation	3.1	An indirect approach to economic regulation is recommended for the longer term.
		3.2	A direct approach only be adopted where there is sufficient evidence that a retailer's performance involves a potential exercise of market power, or where required to manage short-term (emergency) cost pressures. In the latter instance prices should be determined by the Minister.
		3.3	The QCA issue a guidance paper to address implementation issues that follow from the Minister's Decision relating to the QCA recommendations.
	The appropriate form of regulation for SEQ retailers	3.4	Retailers be subject to an annual performance monitoring framework.
		3.5	Annual performance monitoring be complemented by the prospect of a cost of service review and the potential for price determination by the QCA.
		3.6	The QCA Act be amended for the purposes of the price determination referenced in 3.5 above.
	Key elements of the long-term framework: timing issues	3.7	Annual performance monitoring be undertaken on an ex post annual basis.
		3.8	Retailers submit their completed information returns for a financial year by 31 October following the financial year.
		3.9	Retailers make their first submissions by 31 October 2015.
		3.10	The QCA prepare a draft report by 29 January and a final report by 31 March for the preceding financial year.
		3.11	In the event of a regulatory price determination, a 5-year regulatory period apply unless circumstances justify a shorter period.
		3.12	During any cost of service investigation, the component of the price relating to retail and distribution services be frozen (in real terms).
	Binding rulings	3.13	Where a SEQ water retailer seeks a binding ruling for particular initiatives in a future period, relevant details be submitted to the QCA at the retailer's discretion.
		3.14	The QCA be bound by its ruling for the purpose of 3.13 provided that there are no significant deficiencies of fact later found to exist at the time of a submission.
	Incentives - CPI-X	3.15	Changes to prices, and MAR where relevant, be monitored against CPI-X.
	CPI	3.16	CPI be based on the RBA forecast national CPI (or the mid-point

Chapter	Topic	No	Recommendations
			of a forecast CPI range) applying at the time of SEQ retailers' pricing decisions.
	The X-factor	3.17	An X factor of 0.25% be applied annually (to prices, and the MAR where relevant).
		3.18	The QCA review the X factor in five years or earlier if it is considered a more appropriate estimate should be applied.
	Unders and Overs	3.19	Where prices exceed CPI-X, retailers be required to justify the differences.
		3.20	Differences (arising from 3.19) be accepted as pass-throughs where they are efficient and uncontrollable or where they have been substantiated by a retailer prior to the reporting period.
		3.21	Any changes in prices above CPI-X be a significant factor in deciding whether a cost of service review (except insofar as they incorporate 3.20).
		3.22	Eligible under-recovery from a past period be recovered on a NPV-neutral basis over a period of up to 10 years from 1 July 2015.
		3.23	Where a retailer has not fully regained its 2013-15 under-recovery at the end of the ten-year period an application should be made to the QCA to allow this under-recovery to be carried forward to later years.
		3.24	Where a water retailer is considered to have over-recovered revenue during the 2013-15 period the over-recovery must be passed back through future price adjustments and within three years.
		3.25	Eligible under-recovery resulting from unexpected changes in demand be recovered on a NPV-neutral basis over a period of up to 10 years from the time they are incurred.
		3.26	Under-recovery of efficient and uncontrollable costs be recovered on a NPV-neutral basis over a period of up to 10 years from the time they are incurred.
		3.27	The benefits of outperformance, adequately documented by retailers and approved by the QCA, be retained by retailers for a period of three years, and then returned to customers.
	Triggers for cost of service reviews	3.28	The QCA initiates a cost of service review where it considers there is sufficient evidence of a potential exercise of market power and where the potential benefits of doing so exceed the expected costs.
		3.29	In its public annual report, the QCA report on and identify any concerns with a retailer's customer engagement policies or procedures, investment strategy, or pricing principles as well as any intention to initiate a cost of service review.
	Transition to annual performance monitoring framework	3.30	The QCA use the outcomes of the 2013-15 investigation to inform whether retailers transition to the annual performance monitoring framework.
		3.31	The criteria for an immediate move to annual performance monitoring be: (a) absence of public interest or equity issues that may warrant regulatory review

Chapter	Topic	No	Recommendations
			<ul style="list-style-type: none"> (b) that regulated services are clearly defined and separated from non-regulated services (c) evidence that market power is not being exercised (d) absence of imminent material changes in circumstances or major infrastructure costs (e) demonstrated capacity to provide information accurately and on time.
		3.32	Performance in customer engagement, strategic planning for long-term investment, service quality and pricing principles also be taken into account in assessing whether retailers should proceed to annual performance monitoring.
Regulatory parameters	Asset valuation	4.1	The QCA adopt the QCA forecast RAB at 1 July 2015 as established in the 2013-15 price monitoring review (reflecting adjustments to the final assessments of retailers' suitability for transition), for annual performance monitoring.
		4.2	Prudency be assessed against key drivers: compliance, growth, renewals, service and business efficiency. Efficiency be assessed against the scope and standard of works.
		4.3	Water retailers ensure investments are consistent with prudency and efficiency tests.
		4.4	For setting prices, retailers roll forward the RAB taking account of prudent and efficient capital expenditure, depreciation and asset disposals.
		4.5	For rolling-forward the RAB CPI be adopted.
		4.6	Capital revenues (from capital contributions including infrastructure charges) and capital subsidies (where verifiable) be taken into account in determining the revenue requirement.
		4.7	Easements be valued at market value where this is available, or historic cost indexed forward by CPI (in the absence of an observed market value).
		4.8	Work in progress spanning more than a year be capitalised until commissioning at the appropriate WACC.
		4.9	A working capital allowance account for the timing difference between receivables and payables, plus inventory costs where it can be justified.
	Return on capital	4.10	The form of the benchmark discount rate for the long-term regulatory framework for SEQ water retailers from 1 July 2015 be a single nominal post-tax 'vanilla' WACC (Officer WACC3).
		4.11	The same benchmark WACC apply across all SEQ water retailers.
		4.12	The benchmark WACC be updated annually to align with the recommendations made for estimating the cost of debt.
		4.13	<p>The risk-free rate be estimated annually from 1 July 2015 using:</p> <ul style="list-style-type: none"> (a) Commonwealth Government bond nominal yields as the proxy for the risk-free rate (b) an averaging period of 20 business days just prior to the annual update (c) a term to maturity of one year.

Chapter	Topic	No	Recommendations
		4.14	A market risk premium of 6.5% per annum apply from 1 July 2015.
		4.15	A benchmark capital structure of 60% debt and credit rating of BBB, apply to all SEQ water retailers from 1 July 2015.
		4.16	A benchmark asset beta of 0.35 apply to all SEQ water retailers from 1 July 2015. This corresponds to a levered equity beta of 0.65 at leverage of 60%.
		4.17	Subject to a final QCA position, from 1 July 2015, the benchmark cost of debt for SEQ water retailers be estimated annually using the 'on-the-day' approach comprising: <ul style="list-style-type: none"> (a) a risk-free component of the cost of debt estimated using the prevailing one-year risk-free rate (b) a debt risk premium component of the cost of debt using the prevailing 10-year benchmark (BBB) bond rate (c) an interest rate swap allowance to convert the term of the risk-free rate from 10 years to one year (d) an allowance for debt raising costs of 10.8 basis points per annum.
		4.18	A debt beta of 0.11 apply to all SEQ water retailers from 1 July 2015.
		4.19	A gamma of 0.47 (based on a distribution rate of 0.84 and a utilisation rate of 0.56) apply from 1 July 2015.
	Return of Capital	4.20	Return of capital be based on straight-line depreciation.
		4.21	Details of alternative depreciation profiles for long-life assets be justified to the QCA.
	Operating costs	4.22	Operating costs are prudent if justified in terms of service, growth or compliance drivers.
		4.23	Operating costs are efficient where they represent the least cost over the life of the assets.
	Tax equivalents	4.24	The MAR includes an allowance for tax equivalents based on a benchmark private sector entity.
	Cost allocation	4.25	Each significant common cost pool be allocated to services and customers on the basis of a causal relationship between the costs incurred and the water or wastewater service performed.
		4.26	If a causal relationship cannot be established between costs incurred and the relevant service, a cost allocator be adopted which reflects a strong positive correlation with changes in costs.
	Information requirements	4.27	Retailers self-assess the level of information to be submitted to the QCA.
		4.28	The QCA seek additional information on any matter that it considers necessary to assess whether the change in prices can be justified.
		4.29	The QCA indicate on its public website that it is seeking further information if the initial submission is deficient.
Customer Engagement		5.1	Each retailer, in consultation with its customers, develop a strategy for customer engagement based on best practice principles.

Chapter	Topic	No	Recommendations
		5.2	Customer engagement: (a) promote understanding of customers' needs and be representative and responsive of customer views (b) be relevant, evidence based, open and transparent, timely, collaborative, and cost-effective.
		5.3	The customer engagement strategy include a customer consultation committee.
Strategic approach to long term investment	Legislative framework	6.1	The legislative and regulatory planning requirements for council water businesses be reviewed with a view to reducing any duplication of the requirements applied to the DRs.
	Strategic planning	6.2	Retailers provide evidence of board/council approval and Ministerial endorsement of their relevant Water Netserv Plans to the QCA.
	Co-ordination with other planning requirements	6.3	Retailers annually report to the QCA on their annual capital works plans or annual performance plans.
		6.4	Part A Water Netserv Plans and any updates for minor and major amendments be submitted.
	Asset management	6.5	Retailers annually report to the QCA, details of their compliance with the asset management standard they have implemented and progress in addressing areas of improvement to achieve good industry practice.
		6.6	Should a cost of service review be triggered, the QCA assess retailers' asset management practices against PAS-55.
	Evaluating efficiency of long-term investment alternatives	6.7	Retailers annually report to the QCA details of the project evaluation practices used for significant capex projects.
		6.8	Retailers submit details of project evaluation, including options analysis and risk analysis, for up to the 6 largest capex items, where required as part of a request for further information.
Service quality performance reporting	Objectives and criteria	7.1	The service quality performance reporting framework incorporate indicators that are: (a) relevant and meaningful to stakeholders (b) linked to controllable costs (c) suitable for relative performance assessment within, and across, retailers over time (d) cost effective - the costs of collecting and reporting indicators should be justifiable relative to benefits (e) measurable - clearly defined, quantifiable, reliable, and verifiable.
	Choice of indicators for SQPR	7.2	Twenty service quality indicators identified in table 39 (Part B) be monitored annually.
	Reporting procedures	7.3	The QCA obtain the service quality indicators from retailers' websites. If not available by the due date for submissions, the QCA obtain the information directly from the retailers.
	Performance assessment and enforcement	7.4	Service quality performance trigger a cost of service review where there is a material deterioration in performance or where service quality changes are not commensurate with changes in costs.

<i>Chapter</i>	<i>Topic</i>	<i>No</i>	<i>Recommendations</i>
		7.5	Retailers consult with customers before implementation of a guaranteed service level (GSL) scheme for high value indicators.
Information requirements	Level 1	8.1	Level 1 information requirements include: (a) prices and components of prices (b) customer engagement practices (c) strategic planning and co-ordination (d) service quality performance indicators.
	Level 2	8.2	Level 2 information requirements, in addition to level 1, include revenue for water and sewerage activities, residential and non-residential.
	Level 3	8.3	Level 3 information requirements in addition to level 2, include: (a) details of changes in relevant costs and cost pass-throughs (b) details of recovery of past under-recovery.
	Level 4	8.4	Level 4 information requirements in addition to level 3, include broad data to estimate the MAR such as: (a) RAB roll-forward summary including total commissioned capex, depreciation and disposals (b) return on capital (WACC) (c) total operating costs for water and sewerage, by type and by activity (d) tax equivalents.
		8.5	Any cost of service review, in addition to the information required for level 4, incorporate a review of the prudence and efficiency of costs.

2.2 Pricing principles

The recommended general pricing objectives and principles are in Table 2. The recommendations for specific services are provided in Table 3.

The application of the recommended pricing principles needs to take into account the retailers' circumstances. That is, whether the principles should be applied depends upon a consideration of the benefits and costs of applying the principles, having regard to for example, their administrative feasibility, customer preferences, cost-effectiveness and fairness and equity.

Table 2 General pricing objectives and principles

	<i>No</i>	<i>Recommendations</i>
Pricing objectives	1.1	The pricing of urban water, sewerage, trade waste, recycled water and stormwater re-use services provided by retailers should: (a) promote economic efficiency (b) ensure revenue adequacy (c) take account of the public interest (including fairness and equity) (d) be transparent, predictable, simple and cost-effective to apply.
Pricing Principles	1.2	Retailers seek to apply the pricing principles or advise of any departure, the reasons for the departure and provide relevant supporting analysis.
	1.3	Prices reflect marginal cost, together with a two-part tariff where necessary to achieve revenue adequacy.

	No	Recommendations
	1.4	Prices be set between incremental (marginal) cost and stand-alone cost.
	1.5	Prices reflect the LRMC of providing a particular service.
	1.6	Prices reflect SRMC when SRMC for a particular period significantly exceeds the LRMC for a particular service. This is sometimes referred to as scarcity charging.
	1.7	LRMC be estimated on the basis of the perturbation or AIC method.

Table 3 Pricing principles specific to services

Chapter	Topic	No	Recommendations
Urban Water	Demand forecasting	2.1	Long-term forecasts used for capital planning be based on projected regional average urban demand as published in the SEQ water security program.
		2.2	Short-term demand forecasts be based on estimated water use per customer/connection and population forecasts (number of connections) and take account of any bounce-back effect as well as local circumstances.
		2.3	Demand forecasting practices and alternative models (including demand elasticities) be reviewed by a working group including the retailers, QCA and other relevant parties.
	Volumetric charges	2.4	The volumetric charge for urban water services reflect LRMC.
		2.5	Where prices exceed average costs, short-term over-recovery of revenues be addressed by ex-post rebates with adjustments made to the fixed charge.
	Fixed charges	2.6	Fixed charges for urban water services recover the maximum allowable revenue (MAR) not covered by the volumetric charge.
		2.7	Charges not encourage customers to by-pass or disconnect from the network.
	Inclining and declining block tariffs	2.8	Inclining and declining block tariffs not be introduced, and where already in place be phased out over time to a single volumetric charge.
	Location-based or nodal pricing	2.9	Location-based or nodal charges for urban water services be applied where there are significant differences in costs between locations or between nodes.
	Peak period and seasonal charges	2.10	The QCA notes that peak-period or seasonal charges for water are not in use in Australia. Responses from retailers show little interest in introducing such charges. The QCA recommends that retailers only consider peak period or seasonal charges where clear net benefits are likely.
	Self-selecting tariffs	2.11	Self-selecting tariff options be considered where there is sufficient information for customers to make choices, provided they do not result in cross-subsidies or introduce unmanageable revenue risks for the retailer.
	Service quality differentials and interruptible tariffs	2.12	Price/service quality tariff options be adopted, where material cost differentials are associated with different levels of service.

Chapter	Topic	No	Recommendations
	Metering and billing arrangements	2.13	Individual metering of flats and units be adopted where economic and practical.
		2.14	Where water is separately metered, subject to legislative constraints, tenants be billed the fixed and variable charges for water and sewerage.
		2.15	Customers with unmetered connections be charged a deemed amount for usage, reflecting average use for similar property types.
		2.16	Customers with unmetered connections be given the option of paying for meter installation.
		2.17	For vacant and non-connected properties where water and sewerage services are available for connection, the water and sewerage access charges that apply to connected properties (the relevant domestic or commercial charge) be applied.
		2.18	Concessions and rebates: <ul style="list-style-type: none"> (a) reflect a consistent approach between the retailers (b) be set to apply to either the fixed charge or as a total direct adjustment to the gross invoice amount (c) be capped so as not to subsidise discretionary use (d) be transparent with acknowledgement of the source of, and purpose for, particular concessions/rebates.
		2.19	Concessions associated with excess water use caused by leaks, be determined by the retailers in consultation with customers.
		2.20	Hardship arrangements be consistent with legislative and operating requirements and avoid cross-subsidies where practical.
		2.21	Meter-reading and billing be undertaken at least quarterly.
		Tradeable water entitlements	2.22
Sewerage	Demand forecasting	3.1	Demand for sewerage services be based on forecast growth in connections, linked to population growth.
	Efficient pricing	3.2	For residential customers: <ul style="list-style-type: none"> (a) sewerage charges be based on a single part tariff with a fixed charge per customer or connection (b) volumetric charges be applied where these can be effectively measured (including by discharge or return factors).
		3.3	For non-residential customers: <ul style="list-style-type: none"> (a) fixed sewerage charges be based on the impact of the customer on the system. In the absence of direct metering, water connection size be accepted (b) volumetric charges be applied where these can be effectively measured (including by discharge or return factors).
		3.4	Location-based or nodal pricing for sewerage services be applied where there are significant differences in costs between nodes.
Trade Waste	Demand forecasting	4.1	Where the customer base changes in line with growth, trend information be used to provide reasonable forecasts of demand for trade waste services.

Chapter	Topic	No	Recommendations
		4.2	Retailers consult with large customers to monitor any step changes in demand for trade waste services.
	Efficient pricing	4.3	Trade waste prices be based on the impactor pays principle.
		4.4	Charges be based on the LRMC of transport, treatment and disposal of trade waste, with variable charges based on volume and contaminant load.
		4.5	Specific charges for the management of trade waste services (inspection and monitoring) be applied on a cost reflective basis.
		4.6	Charges be differentiated according to customer type and risk factors, and by location (as part of risk assessments) if considered cost effective.
	Compliance	4.7	Consistent with regulations, retailers apply penalty charges for non-compliance and recover the efficient costs associated with breaches.
Recycled Water	Efficient pricing	5.1	The revenue requirement for recycled water services be based on the total additional cost of recycling less avoided costs and less developer contributions.
		5.2	Where there are costs associated with recycling that cannot be recovered from recycled water customers, direct and avoidable costs be allocated between relevant parties on a beneficiary pays basis.
		5.3	Recycled water volumetric prices be based on LRMC for the established recycled water scheme where possible, less marginal avoided costs. If necessary, recycled water volumetric charges be set lower than LRMC to ensure demand clears supply (where the recycled water volumetric charge is higher than the potable water volumetric charge).
		5.4	Where volumetric charges do not ensure revenue adequacy, fixed charges in a two-part tariff be set to recover remaining revenues, subject to willingness to pay.
		5.5	If the revenue requirement is still not achievable (that is, where fixed and volumetric charges exceed willingness to pay), unrecovered amounts be allocated to potable and sewerage charges in proportion to avoided cost allocations.
		5.6	The approach and charges be periodically reviewed, as customer acceptance increases.
	Sewer mining	5.7	Charges for sewer mining be set on a case-by-case basis to reflect relevant direct costs, a share of sewerage system common costs, service costs for any returns, less avoided/avoidable costs.
Storm-water	Stormwater reuse	6.1	Stormwater reuse pricing be subject to the same pricing principles as recycled water.
	Stormwater drainage	6.2	Rate-based charges continue to be used for recovery of stormwater drainage costs.
		6.3	Charges for stormwater drainage be transparently identified on customer bills.
Industry-wide issues	Externality pricing	7.1	The inclusion of externality prices be supported where material impacts can be valued accurately and cost effectively.
		7.2	Prices incorporating estimates of externalities avoid duplication with

<i>Chapter</i>	<i>Topic</i>	<i>No</i>	<i>Recommendations</i>
			other mechanisms and be transparent.
		7.3	Licences and market mechanisms be applied where the benefits are considered to justify the costs.
	Third party access	7.4	Third party access prices be based on the cost of service methodology, and take account of relevant joint or common costs. Any departure from this methodology (such as applying the retail minus methodology) is to be justified.
		7.5	Where retail prices are averaged across user groups (postage stamp tariffs) access prices be adjusted (where required) to ensure costs are not increased for remaining customers.
	Price paths	7.6	Price paths be implemented where there are substantial price increases, having regard to customers' ability to pay and the impacts on the service provider's financial viability.
		7.7	Price paths be set on a revenue neutral basis.

2.3 Transition assessments

Subject to acceptance by the Ministers and receipt by the QCA of a referral to apply the annual performance monitoring framework, the QCA's recommendations for retailers transitioning to annual performance monitoring are in Table 4.

Table 4 Recommendations for transition

<i>Reference</i>	<i>Retailer</i>	<i>No</i>	<i>Recommendation</i>
Appendix E	Unitywater	E.1	Unitywater move to annual performance monitoring.
Appendix F	QUU	F.1	QUU move to annual performance monitoring.
Appendix G	Logan Water	G.1	Logan Water move to annual performance monitoring.
Appendix H	Redland Water	H.1	Redland Water provide the revised pricing model by 30 November 2014 for review by the QCA and: <ul style="list-style-type: none"> (a) if the QCA can confirm there is no exercise of market power, the QCA recommend to the Minister that Redland Water move to annual performance monitoring (b) if the QCA considers there is an exercise of market power, or if Redland Water do not submit their pricing model to the QCA by 30 November 2014: <ul style="list-style-type: none"> (i) the QCA publicly release a statement to that effect and advise the Minister accordingly (ii) Redland Water address the QCA's concerns about the potential exercise of market power, and submit its pricing model at the time of the first review under the annual performance monitoring framework.
Appendix I	Gold Coast Water	I.1	Gold Coast Water move to annual performance monitoring.

GLOSSARY

C

CPI Consumer price index

G

GCCC Gold Coast City Council

L

LRMC Long-run marginal cost

M

MAR Maximum allowable revenue

MRP Market risk premium

N

NPV Net present value

Q

QCA Queensland Competition Authority

QUU Queensland Urban Utilities

R

RAB Regulatory asset base

RBA Reserve Bank of Australia

S

SEQ South east Queensland

SEQ Customer Code Water and Sewerage Services Code for Small Customers in South East Queensland

SRMC Short-run marginal cost

W

WACC Weighted average cost of capital

X

X X factor - a measure of improvement in efficiency considered achievable

REFERENCES

QCOSS 2014, *Submission to QCA Long Term Regulatory Framework for SEQ Water Entities*, Submission to the QCA, July.

Queensland Commission of Audit 2013, *Final Report*, February.