

Our ref: A1365452

Dr Malcolm Roberts  
Chairman  
Queensland Competition Authority  
Brisbane QLD 4001

28 February 2013

Dear Dr Roberts

### **Draft Report South-East Queensland Interim Price Monitoring for 2012-13**

Thank you for the opportunity to respond to the Queensland Competition Authority's Draft Report entitled "South-East Queensland Price Monitoring for 2012-13 Part A Overview; Part B Detailed Assessment" and SKM's report on demand forecasts including related appendices and reports.

Unitywater welcomes the Authority's draft findings that Unitywater:

1. Appropriately applied the CPI price cap;
2. Has not exercised monopoly power in 2012-13; and
3. Water reticulation and sewage transport and treatment services revenue forecast of \$438.30 million was below the Authority's maximum allowable revenue estimate of \$476.3 million.

Unitywater appreciates the Authority's and Halcrow's constructive comments provided while reviewing the sample of capital and operating expenditure that resulted in a finding that the expenditure was both prudent and efficient.

Unitywater has also commenced a range of initiatives which are aligned with the QCA's desire to ensure water and sewerage services and delivered at the lowest total cost while meeting required standards. These initiatives are outlined further below.

Unitywater also provides the following responses to the Authority's and Halcrow's comments and findings:

#### **Demand**

Unitywater welcomes the Authority's finding that, while lacking in a degree of sophistication, Unitywater's demand forecasting methodology for 2012-13 is reasonable. Unitywater acknowledges and accepts that non-residential water use should be based on connections rather than EP.



Unitywater notes the Authority's comments on demand forecasting methodologies and agrees in principle that efforts aimed at enhancing data collection and model construction should be made over time. Unitywater acknowledges and appreciates SKM's analysis of the three main approaches to be utilised to enhance demand forecasting.

Given the absence of detailed data regarding which customers have participated in retrofit and rebate programs, and the significant cost impost associated with the analysis, Unitywater agrees with SKM's and the Authority's view that Sydney Water's panel data-based analysis is unlikely to be a viable option in the SEQ context.

Consistent with SKM's recommendation, Unitywater will consider the relative merits of adopting an end-use modelling approach. Unitywater notes that the NWC and WSAA are supportive of the development of an end-use model and agrees with the features of such a model as outlined by SKM. It is envisaged that such an approach could be used to model demand forecast in 2014-15.

Unitywater will continue to document, revise, and improve its demand forecasts as the business gains operational experience and knowledge of customer behavioural patterns become clearer as restrictions previously in place have been lifted.

### **Depreciation and Capitalised Interest**

The Authority has identified two minor issues associated with the logic underpinning the financial models used in Unitywater's submission. These issues relate to:

1. Commissioning – Unitywater's model understates the amount of capitalised interest and applies a 7.11% WACC, instead of a 9.35% WACC, being the opportunity cost of funds for the business as a whole; and
2. Calculation of Depreciation – Unitywater's model understates depreciation, resulting in the RAB being overstated.

Unitywater is currently making relevant changes to the models in question and should have updated versions at the earliest opportunity.

### **Operating Expenditure**

Unitywater notes the approach taken by Halcrow to assess the reasonableness of corporate costs, but suggests a more appropriate benchmark for comparison would have been an entity such as Hunter Water Corporation which, while enjoying greater maturity than Unitywater, has a substantially similar corporate footprint. Unitywater's concern with using Sydney water as a benchmark is set out below:

1. Sydney Water as a highly urbanised entity enjoys the benefits of a density of its customer base and therefore is not an optimal comparator for direct benchmark comparison given that:
  - 1.1 Sydney Water is known to have adopted an outsource model which is likely to materially understate the true costs associated with it delivering its corporate function;
  - 1.2 Sydney Water is a significantly larger entity than Unitywater and enjoys the benefits of scale to generate and drive cost efficiencies across its business in a manner that





- is not possible for a substantially smaller business such as Unitywater. One example of this is the density of customers per kilometre of water main, based on the most recently available 2010-11 figures show Sydney Water has 85 customers per km of water main and Unitywater has 49 customers per km of water main; and
- 1.3 Sydney Water is an established business with a corporate cost structure reflecting a “business as usual” level of maturity which Unitywater has yet to achieve. There are a substantial number of complexities at the corporate level which Unitywater, still in its infancy, has dealt with in 2012-13.
  2. In benchmarking corporate costs, Halcrow’s report considered that “the key ratio is that of corporate costs to customer numbers”. Firstly Unitywater considers that corporate costs need to be defined similarly to ensure an ‘apples with apples’ comparison in order to be more meaningful. The rationale provided was that “this shows most clearly the impact of the level of corporate costs to customer bills.” Given that Unitywater does not charge every customer a simple fixed charge, but instead charges its customers both a fixed and variable component, the logic applied by Halcrow is flawed. The more robust and informative comparison is that based on revenue, which appears to have been dismissed in Halcrow’s subsequent analysis and commentary. When the more appropriate revenue comparison is used, Unitywater’s corporate costs position it third out of the six entities comprising the benchmark sample.
  3. The Authority’s templates, which emphasise the provision of operating expenditure data based on category, do not reflect the fact that many of these categories are not mutually exclusive. Separating functional expenditure, for example corporate costs, from category expenditure (such as electricity) is complex, time-consuming and subjective. It is highly unlikely that any two entities would, left to their own devices and without a consistent methodology, perform this in the same way. The Authority’s current template set for capturing data may distort results and therefore not provide useful comparisons.

Unitywater therefore considers that the \$2.5 million reduction to 2012-13 corporate expenditure is excessive and fails to recognise Unitywater’s geographic footprint; maturity, and the significant progress that Unitywater has made in the last two and a half years. Unitywater recognises that there remain challenges ahead and is committed to reducing costs and planning to deliver further efficiencies to our customers.

### **Unitywater’s Achievements and Future Direction**

Unitywater operates a complex business in order to ensure supply of water and sewerage services across more than 5,000 sq km. Doing this well requires the Board and Management to undertake long term strategic planning years in advance of turning the first sod at a site to construct sewage treatment plant, or a trunk sewer main (a large diameter sewerage pipe).

Unitywater’s Corporate Strategic Plan is a blueprint for guiding the business towards maturity and growth. As a relatively young business Unitywater has successfully integrated the two previous Council water and sewerage businesses and established capabilities to deliver services previously not undertaken by the Council water and sewerage businesses in their own right. These functions included customer service and billing, procurement, corporate governance, risk management, end to end finance functions and integrated work on risk planning. This has allowed Unitywater to lower Council capital expenditure forecasts from





approximately \$250M pa to approximately \$130M pa for water supply and sewerage infrastructure through rigorous validation of projects. During 2011-12 and 2012-13 Unitywater has and continues to consolidate key corporate systems including HR/Payroll, Billing and Customer Services and Asset Management and Asset Accounting systems, while concurrently rationalising property holdings and exiting Council platforms for IT systems. These investments are the enablers to further reducing costs within the business.

The Corporate Strategic Plan includes plans for corporate services, customer service, asset management, operations and maintenance, growth management, environmental management, and water resources as they relate to Unitywater and the region. Unitywater's principal task is to optimise the performance of our assets to ensure we meet the environmental, social and economic aspirations of our communities.

Unitywater is using the statutory required planning instrument called the Netserv plan as its marshalling vehicle to develop long term strategies across a range of issues. The Netserv plan describes the growth and investment strategy and how the business will optimise performance, reduce service costs, charge for its services and infrastructure, and maintain and renew its assets for the next 30 years. The Netserv Plan is a key tool for the implementation of the Corporate Strategic Plan and provides a process for continual improvement within the business.

Unitywater is well underway in preparing its Netserv Plan which is intended to:

1. Provide for strategic planning;
2. Ensure Unitywater provides safe, reliable and secure water supply and sewerage services;
3. Plans for the delivery of infrastructure to supply water and sewerage services for the next 20 years;
4. Integrate land use planning and infrastructure planning for water supply and sewerage services; and
5. Manage water supply and sewerage services in an ecologically-sustainable way.

These plans and initiatives are being undertaken by Unitywater.

### **Sewage Treatment Plant Strategy**

The Unitywater service area is experiencing significant population growth. This population growth is causing increased pressure on services, leading to upgrades to sewerage networks and treatment plants in order to accommodate load, protect the environment and meet water quality objectives.

Unitywater's sewage treatment plants (STPs) were built by local governments over a number of decades and vary in terms of capacity and technology. The establishment, upgrading and renewal of sewage treatment plants represents the largest capital expenditure item for Unitywater. Unitywater has developed a long-term strategy that will guide how to plan the future delivery of sewage treatment services.

Unitywater currently operates 18 sewage treatment plants (STPs). A number of treatment plants have been identified for upgrades in the coming years due to a combination of population growth, asset renewal and changing standards of service. Potentially, new





treatment plants may also be required. Unitywater has undertaken a strategic review of how it provides treatment plant services across the region.

A key question that is addressed in this strategic review is the location, number and capacity of treatment plants, to achieve an optimal whole of business outcome. Linked to this question is the consideration of catchment boundaries and network changes in the short and long term, demand scenarios within catchments, opportunities for re-use of treated effluent and the impact of future lifestyle and consumption.

Unitywater is developing a strategy to examine innovative ways of processing the sewage collected to turn it into a variety of valuable by-products. The essence of this idea is to turn our treatment plants into factories to provide better environmental outcomes, generate income and reduce costs to our customers. Possibilities include recovering phosphorous and nitrogen for fertiliser, recovering paper pulp, harvesting methane for electricity generation and producing hydrogen for fuel cells.

The implementation of the treatment services strategy will have a lasting impact on the community and on the long term business sustainability of Unitywater.

The provision of sustainable treatment services requires a move away from incremental and piecemeal improvements, toward a more integrated catchment system approach covering all treatment facilities and upstream collection systems. The treatment services strategy provides a holistic approach, considering treatment services not just in terms of water quality protection; but as measured by a triple bottom line of social, environmental and economic benefit.

The treatment services strategy has identified that the strategic direction for the urbanised areas of the Sunshine Coast and Moreton Bay should focus on centralisation of treatment at a smaller number of treatment plants than currently operated by reducing from 18 treatment plants firstly to 12 then ultimately to 9 treatment plants by 2054. Decentralised treatment should continue to be provided for further afield communities of the northern Sunshine Coast and the hinterland. Centralisation of treatment services for the urbanised areas will offer opportunities for optimal operation, energy generation, and recovery of water and nutrients.

### **Rationalisation of Existing Infrastructure – Sewerage Pump Stations**

Unitywater is examining ways to rationalise its 777 sewage pump stations within its region. For example, a detailed pilot review is in progress for Bribie Island. A range of options to reduce the number of pump stations have been explored and compared these against a multi criteria assessment including economic analysis, operational efficiency (electricity, maintenance) and to date that project is continuing to examine ways to rationalise the number of sewerage pump stations. This process is highlighting the difficulty and costs associated with retrofitting a more efficient network to a relatively young network.

### **Streamlining and Reducing Development Costs – SEQ Design and Construct Code**

Unitywater has worked closely with other South East Queensland water supply and sewerage service providers to develop standardised policies and codes. The South East Queensland Design and Construction Code standardises water and sewerage infrastructure works, and the proposed Utility Model legislation will replace the existing development control process under the Sustainable Planning Act with a simpler faster 'connections approval' process which will





have benefits including reducing development costs. Undertaking this initiative has required a significant commitment of resources and the benefits will all be in the future in term of reduced costs of compliance and planning. But this will not necessarily reduce labour hours required, as the workforce will redirect efforts to address a range of other concerns.

### **Leveraging Collective Advocacy and Cost Sharing – Memberships and Collaborative Working**

Unitywater leverages its membership of peak water associations, including the Australian Water Association, Water Services Association of Australia and Healthy Waterways, to amplify the benefit of our limited research and development budget and allows networking with industry counterparts, professional development and knowledge-sharing opportunities.

### **Optimising Water System Leakage**

Water system leakage reduction measures include installing localised pressure management valves to better manage loss through joints, and sealing reservoirs to prevent leaks. Unitywater invests in initiatives on this to conserve water resources and to save customers money.

1. Unitywater maintains infrastructure to optimise the trade-off between the cost of water loss and the cost of loss prevention monitoring and reporting;
2. Unitywater carried out a water balance analysis for the one year period from 01/01/2010 to 31/12/2010 to assess the system losses. The total non-revenue water (NRW) for Unitywater's service area was 66 L/con/day with an Infrastructure Leakage Index (ILI) of 1.11. The ILI is the most detailed and relevant indicator for operational management of real losses. It is a non-dimensional index which assesses the overall efficiency of management of real losses in the system infrastructure (up to the customer meter) at the current operating pressure. An ILI close to 1.0 represents world best performance in managing real losses. The ultimate goal for Unitywater is to identify the networks' economic levels of leakage (ELL). This is the point at which it is uneconomic to spend additional monies to further reduce losses in the system. Unitywater is only two and a half years old and does not yet have sufficient data to define our ELL. However, Unitywater has invested in systems, processes and people in order to capture data which will take several years to gather, analyse and incorporate into capital and operating expenditure programs; and
3. Utilising billing data and system loss data, Unitywater performs network modelling on an annual basis to schedule the timing for delivery of new infrastructure; and Unitywater uses annual water balance calculations to tailor the water supply network maintenance strategy, to keep losses within an acceptable level.

### **Protecting Waterways**

Periods of heavy rainfall can sometimes lead to local flooding of our sewerage networks, and result in rain-diluted sewage being leaked to our waterways. To minimise the likelihood and severity of these instances, Unitywater invest in overflow prevention measures such as creating emergency storages to hold excess sewage and identifying and sealing cracks and faulty joints in sewer pipes. Planned projects over the next five years include two emergency storages at Redcliffe and one each at Woody Point and Beerwah.



## **Sewage Overflow Abatement Strategy**

Unitywater's Sewage Overflow Abatement Strategy is helping to protect beaches, waterways and public areas by identifying and rectifying causes of rainwater and groundwater entering our sewer network.

By actively working with customers to rectify plumbing and drainage defects on private properties, and by renewing infrastructure as part of our ongoing Sewer Network Rehabilitation Program, Unitywater is actively taking steps to prevent sewage overflows and safeguard the health of our community and the environment.

Unitywater have developed a region-wide strategy that details an extensive program of investigations, flow gauging, modelling and environmental and waterway monitoring to identify any further capital or operating projects necessary to minimise sewage overflows as much as possible. Unitywater's Inflow (illegal stormwater connections) and Infiltration (seepage from ground water into the sewer network) Program is one of a number of strategies being implemented in order to protect public health and the environment. Since 1 July 2010 Unitywater has undertaken approximately 26,000 property inspections, with approximately 1,040 illegal connections of stormwater into the sewerage network identified with 84% of those illegal connections have been rectified.

## **Sewer Odour and Corrosion Strategy**

Unitywater's sewer odour and corrosion strategy will be developed in 2013 to further safeguard community health and amenity by addressing the causes of sewer corrosion and odour. The strategy will involve identifying the causes of these issues and changing the way we operate our networks to minimise the production of substances that corrode pipes and contribute to odour generation. This has the potential to reduce customer complaints and odour issues which is always a concern in Unitywater business.

## **Protecting our Environment**

Once sewage is treated at sewage treatment plants, the effluent water is usually discharged to natural waterways under licences from the Department of Environment and Heritage Protection. Unitywater invest in projects to ensure the sewage treatment plants continue to meet environmental licence requirements. Some of our investments include increasing the capacity of sewage treatment plants to cater for population growth. Projects over the next five years include planned upgrades of our sewage treatment plants at Kawana, Nambour, Landsborough, Coolumb and Maleny. Over the last three years Unitywater has invested in sewage treatment plants at Burpengary East, Cooroy, Murrumba Downs, Maroochydore, South Caboolture and Woodford. These investments support regional development and contribute to environmental outcomes.

## **Enabling Regional Growth – Sewerage**

Unitywater provides new sewerage infrastructure to enable the regional growth that is expected. This typically involves upgrading or building new pipes and sewage pumping stations.





### **Total Water Cycle Management Plans (TWCMP)**

Each of Unitywater's participating councils is required to have a TWCMP in place. The plan aims to address the water cycle issues experienced in the local government area in a socially, environmentally and economically balanced fashion, and provide high level analysis of the preferable sustainable water cycle solutions in all catchments.

The TWCMP is the marshalling plan to consider nutrient offsets and nutrient trading between and amongst point source and diffuse sources of nitrogen in waterways. There now is the basis for a discussion with environmental licence issuers and economic regulators to support least costs nitrogen removal. Unitywater recognises that QCA has to date been supportive in concept and would be pleased to engage with QCA to further develop this concept to assist customers to understand the potential for same or better environmental outcomes for least cost.

### **Capital Works Program**

The solutions proposed and verified through the use of hydraulic models, as well as the projects identified in our Sewage Treatment Plant Strategy, are subject to a detailed project planning and scheduling process to arrive at a suitably timed and financially balanced Capital Works Program which spans 20 years.

Unitywater established a multi-divisional Asset Steering Committee (ASC) to review and recommend capital and operating projects and programs for submission to the Capital Works Committee (CWC) which is a dedicated sub-committee of the Unitywater Board. The governance structure provides the documentation and decision making rigour necessary to demonstrate the need for a project and the examination of innovative solutions to resolve the need as efficiently as possible.

### **Efficient Procurement Processes**

Unitywater has modified its tender negotiation practice to include things such as requests for best and final offers (BAFO) in addition to post tender negotiations. These initiatives have delivered savings when comparing the original tender price and the awarded tender price.

Unitywater has successfully applied these techniques to realise savings across a range of expenditure classes, for example when reviewing insurance coverage, electricity early payment discounts as well as checking invoice unit rates to contracted unit rates and when negotiating major capital works.

Bundling of contracts and supplier rationalisation is another example where Unitywater is delivering savings, reduce duplicative work and avoid administration costs. For example, Unitywater's facilities management covers activities such as cleaning, security and alike. Currently those activities are being rationalised from 24 separate contracts with a number of vendors to ideally 1 contract with one vendor. That will deliver internal savings in administration, legal drafting, contract monitoring and will offer economies of scale in price negotiations.





## **Protecting our Community – Water Quality, Supply and Pressure**

Unitywater protects the community by accurately measuring and assessing our network's water quality and making sure there is suitable flow and pressure for fire fighting. Water quality initiatives include introducing new sampling points for monitoring water quality throughout our network to ensure we get the best representation and best overall measurement of water quality on a system-wide basis. Our fire flow augmentation program aims to ensure that we can supply water with adequate pressure and flow for fire fighting, now and in the future.

## **Water Meter Replacement**

Ensuring accurate measurement of the water we buy, distribute and sell is fair to customers and is necessary for operating our business efficiently. Unitywater plan to replace ageing customer water meters (residential and business), and district meters that help monitor regional water distribution and check system losses. Each year Unitywater undertakes a continuous program to replace aged or defective meters. As water meters age they generally tend to register less water, rather than too much, so keeping meters in good working condition is important to ensure we are recovering the cost of all water used.

## **Operational Efficiencies Customer Service**

Customer service has been streamlined, service improved and costs reduced by consolidating two customer contact centres into one and introducing an easy to remember 1300 0 UNITY number, which is charged at the cost of a local call from landlines within Australia. By listening to customers and businesses via our Advisory Group, customer research and direct feedback, we responded to their needs and introduced a quarterly billing cycle that charges for water usage and fixed access in arrears.

Unitywater's accounts have been redesigned to be more informative and as clear and easy to understand as possible, reducing the demand on call centre staff. Unitywater are planning to introduce more web and telephony-based self service options that will provide greater flexibility for customers, allowing them to access the information they need and pay their accounts online, outside of general business hours. The introduction of Twitter, Facebook, SMS-messaging and YouTube will allow us to interact more instantly with customers, and will provide cost effective channels for disseminating relevant information such as service outage notifications and meter reading tips. The introduction in early 2012 of a new system for customer service and billing, Unify, has streamlined the process for interacting with customers, enabling quicker resolution of customer issues in most cases.

## **Quality Asset Data**

Effective asset management depends upon a reliable and sustainable source of asset information. As engineers develop tools and techniques to optimise the whole life of their asset base, in turn, the demand for qualitative asset information will continue to grow.

Asset information is managed within information systems, systems that comprise people doing work, who work within processes often supported by technology and where technology enables efficiencies in accessing and processing asset information. Asset data quality is the application of metrics associated with the data's intended purpose to ensure the data is "good enough" for its intended purposes.





Having good quality data can increase revenues, reduce costs, improve customer service, and improve employee satisfaction.

Good decisions are based on competent people using quality information about assets to produce the required service. Asset information is very important for organizations because it represents the collective knowledge used to manage assets as well as to produce and deliver products and services to customers. Understanding what information is needed to support decision making process and what data can be gathered as raw material for such information, is an essential starting point to build up an information management strategy.

### **Investing in Facilitative Technologies as Enablers – ICT, SCADA, GIS, CAMS**

Expenditure on 'special' ICT capital works and investing in information technology enablers will reduce our operating costs in the long term, making Unitywater more efficient. Examples include the Unify customer service and billing system and the Consolidated Asset Management System.

Information and communications technologies play a vital role in enabling Unitywater to operate as an efficient, transparent and responsive organisation. New or improved systems that are helping us achieve these aims include:

Supervisory Control and Data Acquisition project (SCADA): The major investment over the next five years in this area is in the installation of an integrated Supervisory Control and Data Acquisition (SCADA) system that can be managed from one network control centre. SCADA will optimise pump and network monitoring and control, allow faster response to outages and other issues, and improve reporting of system performance across our entire service area.

Currently under development, this project aims to upgrade monitoring and communications infrastructure for our entire water supply and sewerage network. This will allow us to safely and automatically monitor and control plant and equipment; more easily record performance to allow better reporting, analysis and planning; and better protect the environment against sewage spills. Having a single and consistent control system for our entire network will provide operational efficiencies and help us to deliver an even more reliable water supply and sewerage service.

Consolidated Asset Management System (CAMS): This system will store a wealth of information about the assets that Unitywater owns, including water supply and sewerage infrastructure, vehicles, buildings and other property. This will unite the disparate asset information that was inherited from our two participating councils and came originally from six former council areas. CAMS will allow field workers to more easily access and update information on the condition and construction of assets; will provide more reliable information to treatment plant operators; and will assist with planning for asset renewal and replacement. CAMS' ability to store images and videos will make it easier to assess the location and state of our assets.

Geographical Information System (GIS): GIS technology will partner with CAMS in being a visual tool through which Unitywater staff will be able to access and update asset information. GIS ensures that staff members know exactly which assets they are working with, as it adds a spatial dimension to database information.





Electronic Document and Records Management System (EDRMS): EDRMS is a single system for managing documents and records, replacing the multiple systems inherited from councils. It provides for more secure and traceable records keeping, and better sharing within our business.

Global Positioning System (GPS): Integration of GPS into our field work allows assets to be precisely located and tracked. Data recorded in the field can be uploaded to our CAMS and GIS systems, making our work more efficient.

### **Employee Expenses**

Unitywater's current EBA expires 30 June 2014. Unitywater's position is that future EBA's will continue to identify and deliver ongoing operational efficiencies. This includes maintaining staffing levels, while the asset base continues to grow, therefore we are doing more work with the same level of resources. There will always be work peaks associated with projects of programs or work requiring additional resources; however the intention is not to permanently increase FTE count.

Within the current EBA Unitywater has realised savings from the introduction of an afternoon shift resulting in approximately \$0.6M saving and lower overtime and call out costs associated with staggered start and finish time for crews that has further reduced pressure on overtime.

As evidenced by the initiatives outlined above, Unitywater is a highly strategic business with a sharp focus on ensuring that its water and wastewater services are both optimised and efficient. Unitywater disagrees with aspects of the QCA's review, particularly around the downward revisions to operating expenditure. In saying that, Unitywater will continue to work closely with the QCA to ensure that outcomes are optimised from both a customer and shareholder perspective.

### **Future Regulatory Environment**

Unitywater looks forward to working with the QCA to establish a longer term regulatory framework that takes a more strategic view than the current annual review of expenditure. The current process has comparatively smaller capacity to reduce costs than through appropriate infrastructure planning, standards, growth and renewals. In this regard, we would like to continue discussions around what a more suitable, robust and strategically focused review process might look like in the future. In the interim, if you require any additional information please contact our Manager Regulatory Affairs, Damian Platts on 07 5431 8235.

Yours Sincerely



George Theo  
**Chief Executive Officer**

Cc Pauline Thomson, Chief Financial Officer, Unitywater.