



Logan City Council

**Price Monitoring
Information Return
2013 - 2015**

Queensland Competition Authority Submission



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1. Introduction

Pursuant to section 23A of the *Queensland Competition Authority Act 1997*, responsible ministers of the Queensland Government have referred Logan City Council to the Queensland Competition Authority (QCA) for a price monitoring investigation for the period from 1 July 2013 to 30 June 2015, relating to monopoly distribution and retail water and sewerage activities.

This document represents Logan City Council's submission to the QCA in regards to price monitoring for the period 2013/14 to 2014/15. This is Council's first submission following the return of the water business back from Allconnex Water. It addresses QCA's information requirements and should be read in conjunction with the data template.

The water business forms part of Council operations and, as such, its financial information is reported in Council's financial statements. Financial results, accounting principles and policies are as disclosed in Council's 2013/14 Annual Report and Budget information for the 2013/14 and 2014/15 financial years, and in the Annual Budget 2013/14 papers.

Information for 2012/13 is based on a forecast used at the time of the 2013/14 Budget and associated price determination, starting from 1 July 2013.

1.1 Our city and our Council

Logan City is a young and vibrant community, home to almost 290,000 people. The original Logan City was created in 1979, and underwent rapid growth over the next four decades. In 2008, the city's boundaries expanded as part of the Queensland Government's local government reform process. It now includes part or all of a number of former northern suburbs from both the Gold Coast City Council and the former Beaudesert Shire Council. Today, Logan City covers 957 square kilometres and has 63 suburbs.



Logan City is governed by Logan City Council. We are a progressive local government striving to build a better city. We do this by planning for the future in a way that is financially responsible, sustainable, and focused on our community's needs. We aim to provide community and businesses with quality services, infrastructure and facilities, ensuring future growth is planned and managed. We are committed to creating a city of opportunities for families, lifestyle and business.

'Corporate governance' refers to the way in which Council undertakes its business. For Council, governance involves open and transparent decision-making and adherence to legislation, policies, processes and practices that ensure effective direction setting, decision-making, management and control to achieve organisational objectives. Council has adopted specific principles of corporate governance that include the organisation's culture and vision, roles and relationships, decision-making, management and accountability. As a local government authority, Council operates in accordance with the *Local Government Act 2009*. Our water and wastewater operations are also guided by the *South-East Queensland Water (Distribution, Retail and Restructuring) Act 2009*.

Our Council, comprising the Mayor and 12 Councillors, is the elected body responsible for the good rule of Logan City and directs the organisation at the highest level. The elected body has legal obligations requiring members to represent the current and future interests of the residents of Logan. It is democratically elected and accountable to its communities for the decisions it makes and the services Council provides.

The operational arm of Logan City Council consists of the Chief Executive Officer (CEO) and other staff. The operational arm of Council is charged with implementing Council's resolutions (decisions) and reporting on the outcomes of resolutions. The CEO also provides executive leadership to the organisation.



1.2 Our water business

Logan City Council operated Logan Water as a commercial business up until July 2010. As a result of the Queensland Government's South-East Queensland Water Reform process, Logan Water separated from Council on 1 July 2010 and became part of the water distribution and retail company Allconnex Water. Logan City Council became a shareholder in Allconnex Water with Gold Coast City Council and Redland City Council. The new company serviced all three local government areas.

On 7 April 2011, the Queensland Government gave councils in South-East Queensland the opportunity to withdraw from their respective water and wastewater distributor retailer authority. Gold Coast City Council voted to withdraw from Allconnex Water.

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

2. Corporate Plan

2.1 Summary

Logan City Council recently released a new Corporate Plan for the period 2013 to 2018. Our vision for the city is:

- Logan City: building our communities, our businesses and our pride

The following priority areas have been identified:

- Building our major infrastructure (MI)
- Building our city's image (CI)
- Building our economic base (EB)
- Building our environment (E)
- Building our service excellence (SE)
- Building the wellbeing of our communities (WC)
- Managing growth in our city (MG)

The water business has significant involvement in the focus areas associated with each of these strategic priorities. The following elements of the Corporate Plan directly relate to capital works planning and delivery:

- M12 – Achieve high quality delivery of the annual capital works program
- M13 - Consider and adopt a plan for harmonisation of water rates, including assessment of trickle feed consumers
- EB3 – Enhance local employment opportunities and local jobs containment
- E3 – Reduce Council's energy costs and carbon footprint through innovation and new technology
- SE2 – Enhance community communication and engagement
- MG1 – Adopt and implement a new citywide planning scheme

Logan City Council's 2013/14 Operational Plan aligns with the Corporate Plan. The following elements of the Operational Plan directly relate to the operational performance of the water business over the current year:

- M12.6 – Water infrastructure Capital Works Program delivered on budget
- M13 - Harmonisation of water and sewerage rates

The priority areas in regard to our organisation:

Our mission

To make a positive difference in people's lives through the quality of the services we provide.

Our goal

To be an organisation where our staff members pursue excellence in all that they do and enjoy high levels of personal job satisfaction.

Our values

- **Our people:** We respect, care about, support and develop our people. We provide a safe workplace where people can explore opportunities, enjoy themselves and achieve high levels of personal job satisfaction.
- **Excellence:** We create an environment where people are clear about expectation and accountable for achieving excellent outcomes. We foster enquiry, innovation and creativity with a focus on continuous improvement.
- **Leadership:** We encourage leadership aligned to our values at all levels of our organisation. We work together to best use our skills and knowledge to pursue challenges and to deliver excellent services to our customers and our community.
- **Integrity:** We are honest and open by saying what we believe, doing what we say and giving permission for others to do the same. We take responsibility, individually and as a team, for all that we do.



2.2 Netserv Plan

A Water Netserv Plan provides information to customers and other stakeholders about a particular water and wastewater network and its services (in this case, the network owned by Logan City Council). A Netserv Plan is a statutory requirement under the South-East *Queensland Water (Distribution and Retail Restructuring) Act 2009*.

The Water Netserv Plan aims to:

- ensure water and wastewater services are safe, reliable and secure
- provide strategic planning of water operations
- plan for the delivery of water and wastewater infrastructure for the next 20 years
- ensure water and wastewater service planning is integrated with land and infrastructure planning
- manage our water and wastewater services in an ecological and sustainable way.

Our Water Netserv Plan is consistent with the South East Queensland Regional Plan 2009-2013 and the expectations of our local community. It comprises two parts:

- Part A sets out Council's commitments to our community and provides general information regarding our water and wastewater services. It explains our commitment to the community, how we serve and engage with customers, how we deliver the right infrastructure, and how we are planning water and wastewater services for the future.
- Part B details how Council will achieve the commitments made in Part A. It is an internal planning document for use by Council officers.

Our Water Netserv Plan is a key strategic and business management tool for our water and wastewater business.

Council's Water Netserv Plan Part A has been through a community engagement phase and has been approved by Council. The plan has recently been submitted to the Queensland Government. The Netserv Plan Part B is currently under development.

2.3 Annual Performance Plan

In accordance with the Local Government Regulation 2012, Council must include an Annual Performance Plan for the water business within the Operational Plan. Performance against this plan is reported on a monthly and annual basis for specific performance criteria in the areas of safety, financial sustainability, drinking water quality management, environmental management, leakage management, network operations, maintenance management and capital program delivery.

3. Customers and pricing

3.1 Customer service

We are committed, 24 hours, seven days a week, to providing a safe and reliable water supply and wastewater services, and providing quality customer service to our customers and residents.

In meeting our customers' water and wastewater needs, we are committed to:

- providing a continuous supply of clean drinking water at an adequate pressure and flow rate for reasonable household and business needs
- collecting, treating and managing wastewater in accordance with our environmental obligations
- maintaining and upgrading our service pipelines to ensure customers continue to receive a reliable water supply
- working with customers and the wider community to minimise the inconvenience of our planned maintenance works
- ensuring service interruptions are rectified as a priority to minimise any impact to customers
- delivering quality outcomes and reasonable timeframes to action requests for service.

Our Water and Wastewater Customer Service Charter outlines customers' rights and our obligations to provide quality customer service.

3.2 Customer service standards

We are responsible for providing water and wastewater services to consumers throughout the Logan City Council local government area including:

- drinking water supply
- recycled water supply
- wastewater collection and treatment
- trade waste management.

The Queensland Government's Customer Water and Wastewater Code requires us to provide a Customer Service Standard to customers within our area.

3.2.1 Water supply service standards

We will be proactive in conserving water and minimising water loss in the water supply network.

Customer service indicator	Target
Water main breaks	< 20 breaks per 100 km of main per year
System water loss	< 95 litres/ connection/day

We will supply water at a serviceable pressure.

Customer service indicator	Target
Minimum pressure at hydrant other than for properties with a trickle feed supply	22m

We are committed to supplying water that meets the National Health and Medical Research Council (NHMRC), Australia Drinking Water guidelines.

Customer service indicator	Target
Compliance with NHMRC guidelines	> 98% of samples pass E.coli test
Microbiological Chemical quality	Compliance with chemical standards at all zones within Council's operational boundaries
Drinking water quality complaints	< 5 per 1,000 connections per year

We aim to minimise the number of unplanned interruptions to the water supply.

Customer service indicator	Target
Connections experiencing unplanned interruption	< 150 (Per 1,000 connections per year)

If water supply is interrupted, we will work to restore it as quickly as possible.

Customer service indicator	Target
Time for restoration of service - unplanned interruption	95% within < 5 hours

Sometimes interruptions to water supply are necessary to carry out maintenance but we will do all we can to keep this to a minimum.

Customer service indicator	Target
Average interruption duration - planned	< 5 hours

3.2.2 Wastewater service standards

To protect public health and the environment, we will remove and treat wastewater with minimal incidents.

Customer service indicator	Target
Dry weather wastewater overflows	<20 per 100km main per year
Dry weather wastewater overflows to customer's property	< 5 overflows to customer properties per 1,000 connections
Validates odour complaints	<3 per 1,000 properties
Wastewater main breaks and chokes	<50 per 100 km mains

If an incident does occur, we will attend to it promptly. Response times are shown in Table 2 of section 3.2.4.

3.2.3 Service standards for customer complaints

We strive to deliver services in accordance with the Customer Services Standards. If customers have concerns or complaints, we will address them promptly.

Customer service indicator	Target
Complaints resolved	>90% within 20 working days

3.2.4 Emergency maintenance works service standards

When we undertake unplanned emergency maintenance works, it will be guided by the customer review standards detailed at Table 1 and 2.

Table 1 - Water supply response times and repair completion times

We commit to these service standards:

Priority 1 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Complete failure to maintain continuity or quality of supply to a customer and or safety/ traffic hazard	Broken water main or service	Within 1 hour	Within 1 hour	Within 5 hours	With 5 working days Notify customer if not at time of repair
	Jammed hydrant				
	No water				
	Weir/lock access				
	Missing lid (meter/hydrant etc.)				
	Stop cock faulty (flooding house - urgent shutdown required)				
	Shutdown required (where meter/valve not isolating/ found or key required)				
Priority 2 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Partial failure to maintain continuity of supply to a group of customers at a non-critical time	Dirty water/colour	Within 4 hours	Within 16 hours	Within 24 hours	Within 5 working days. Notify customer if not at time of repair
	Dirty water taste/odour				
	Poor pressure				
	Reservoir pumps/alarms				
	Leak creating a safety/traffic issue				
	Leak with major water loss (e.g. main break)				
	Stop cock faulty (need to shut off supply today)				
	Shutdown required (where mater/valves not able to be found and flooding and works required for today)				
Asset location - plan and machinery on site					

Priority 3 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Non urgent fault, but significant in the belief of the customer	Water leak (not causing safety/ traffic issue)	Within 36 hours	Within 48 hours	Within 48 hours	Within 5 working days. Notify customer if not at time of repair
	Install temporary service				
	Partial failure of connections				
	Water hammer (stops when taps turned off)				
	Water illegal use (under level 1 restrictions)				
Asset location - no plans or machinery on site					
Priority 4 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Known fault, non-urgent	Faulty meter	Within 5 working days	Within 5 working days	Within 5 working days	Within 5 working days Notify customer if not at time of repair
	Damaged meter (unable to read)				
	Missing/faulty stop tap (no work being carried out)				
	Service disconnection				
	Faulty valve/hydrant				
Priority 5 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Preventative maintenance	Known fault not critical to supply or customer	Within agreed timeframe (1 week default)			
	Planned work				
	Capital works				
	Missing hydrant				

Table 2 - Wastewater service response times and repair completion times

We commit to these services standards

Priority 1 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
A complete failure to contain wastewater within the wastewater system or any problem affecting customers and or safety/traffic hazard during dry weather	Manhole overflowing	Within 1 hour	Within 1 hour	Within 5 hours	Within 5 working days (if not notify customer at time of repair)
	Pump station red light				
	Broken gravity/rising main				
	Missing manhole lid				
	Wastewater odour occurring now				
	Wastewater blockage - locator (camera) on site				
	Subsidence causing immediate danger				
Wastewater treatment plant critical alarms					
Priority 2 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Minor failure within the wastewater system or any problem affecting customers during dry weather	Cracked wastewater pipe	Within 4 hours	Within 16 hours	Within 24 hours	Within 5 working days (if not notify customer at time of repair)
	Pump station fault				
	Partial wastewater blockage				
	Subsidence causing danger				
	Asset location - plant or machinery on site				

Priority 3 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Non urgent fault but significant in the belief of the customer	Minor subsidence Jet rodding Asset locations - no plants or machinery on site Noisy manhole Pump station noisy/wastewater odour	Within 36 hours	Within 48 hours	Within 48 hours	Within 5 working days (if not notify customer at time of repair)
Priority 4 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Known fault non-urgent	Reinstatement System investigation Pump station/manhole noisy (not causing major concern to customer's peace and quiet)	Within 5 days	Within 5 days	Within 5 days	Within 5 working days (if not notify customer at time of repair)
Priority 5 responses	Examples	Response time	Repair time start	Fault repaired	Clean up
Preventative maintenance	Known fault Not critical to supply or customer Planned work Capital works Video surveillance	Within agreed timeframe (1 week default)	Within agreed timeframe (1 week default)	Within agreed timeframe (1 week default)	Within agreed timeframe

3.3 Complaints handling

3.3.1 Complaints management process

We welcome feedback from our customers to improve our business. We have adopted a comprehensive complaints management process with escalation points for unresolved or complex issues.

Our complaints management process is:

- supported by the rest of Council – it is backed by a strong commitment to the complaints systems at all levels of the organisation
- fair – we consider all complaints on their merits
- easily accessible and well publicised for all people, including those with special needs
- responsive to customers – we provide a full, impartial and speedy investigation of concerns, and deliver appropriate responses
- inclusive – continuous improvement is entrenched in the process and complaints management is integrated into other business improvement processes
- effective – we are able to address individual customer complaints and use the information collected to improve overall service delivery; we also regularly review our process to ensure it meets customers' needs
- open and accountable – customers can judge for themselves whether the complaints system is working effectively.

Council's commitment to excellence in customer service ensures complaints and enquiries are managed professionally and responsively. We consider complaints as an opportunity to improve how we deliver services to our community.

3.3.2 Energy and Water Ombudsman

Logan City Council is committed to ensuring customers receive a fair, open and honest outcome to their enquiry or complaint. If you are dissatisfied with the way in which we have dealt with your water or wastewater complaint, you can refer your concerns to the Energy and Water Ombudsman Queensland (EWOQ), who may be able to help.

EWOQ is an independent agency that deals with consumer complaints about billing, metering and general complaint-handling processes of service providers in the energy and water industries.

3.3.3 Financial assistance

Council has a Leak Remission Policy, which offers partial financial relief to customers who have lost water due to a difficulty in detecting a plumbing leak on their property.

We also offer water charge remissions for customers using home dialysis, as well as those who receive home-based medical treatments requiring significant amounts of water.

We appreciate that sometimes unexpected and personal circumstances arise that affect a customer's ability to pay their account on time. If this occurs, it is important you contact us as soon as possible to discuss your options. Each financial hardship case is assessed on a case-by-case basis in accordance with Council policies and relevant legislation.

3.4 Pricing policies

In setting prices for our services, we are guided by legislative requirements and other guidelines from state and federal government. Pricing is ultimately debated, set and approved by Council and, as such, is subject to scrutiny by our community's elected members. Water and sewerage charges are included in our rates notice, which is produced on a quarterly basis. Tariffs to be applied are shown in the Revenue Statement 2013/14, which forms part of Logan City Council's Annual Budget 2013/14 papers. The structure of the tariffs are largely unchanged from prior years with the exception of the price harmonisation of water and sewerage tariffs where there is a reduction in the number of tariffs across the Logan City Council area.

3.4.1 Utility charges

We have adopted a pricing policy of transitioning to maximum allowable revenue (MAR). In calculating MAR, the weighted average cost of capital provided by QCA for the 2013-2015 price monitoring period of 6.57% has been used.

In the 2013/14 budget year, price harmonisation for water and sewerage charges across all areas within Logan City have been achieved. In particular, pricing differences between the transferred areas from the former Beaudesert Shire Council and Gold Coast City Council following the council amalgamation process of March 2008 have been addressed.

Pricing policies regarding water supply:

- The utility charge for water supply comprises a two-part tariff that consists of a base charge and a volumetric charge. The base charge reflects the fixed costs of supply including infrastructure provision. The volumetric charge reflects the cost of water supplied. The total water charge will be influenced by the amount of kilolitres used by the consumer.
- Residential and non-residential customers are charged the same per kilolitre volumetric charge. This charge incorporates a Council charge, as well as a bulk water charge, provided by the Queensland Government. Any yearly increases to the bulk water charge are passed on to the consumer in full.
- Water base charges will vary depending on the diameter of the water service to the property, termed the capacity factor. The standard base charge is multiplied by the capacity factor to calculate the applicable fixed charge.
- Trickle feed and full demand supply are charged on the same basis in regard to the fixed base charge and volumetric charges.
- Remissions for internal water leaks and home dialysis users are available to consumers.

Pricing policies regarding sewerage:

- Trade waste charges are separately billed from sewerage charges. The basis of charging differs from sewerage charges and is in accordance with our Trade Waste Environmental Management Plan.
- Sewerage pricing is pedestal-based, with a number of sewerage units applied to particular categories of customers that reflects the respective usage of sewage treatment services.
- Residential properties with up to three pedestals are allocated 20 units.

3.4.2 Commercial fees and charges

We have a number of charges relating to work such as meter and service installations, meter testing etc. These charges are called commercial fees and charges, with a cost base built on full-cost pricing principles. The charges are generally increased each year, with many of the charges being 'price on application' where a charge is estimated at the time a customer enquires about a particular service.

Current water and sewerage tariffs, and fees and charges, are available on our corporate website (logan.qld.gov.au).

3.4.3 Customer groups

In regard to water pricing, residential and non-residential customers are charged under the same tariff structure. Variations in charges will occur for different water service diameters, which impacts the fixed base charge and varying water usage volumes where volumetric charges are impacted. Reasonable estimates are available of the revenue received for each group. There are approximately 6% of consumers with an emergency or trickle feed water supply, with the remainder supplied through a constant flow system.

In regard to sewerage pricing, residential and non-residential customers are charged on a pedestal basis using the same tariff structure. A number of sewerage units are applied to particular categories of customers reflective of the respective usage of treatment services. Residential and non-residential groups are not separately identified in the accounting ledgers, however, reasonable estimates are available of the revenue received for each group. Approximately 300 connections are serviced through a common effluent drainage (CED) scheme, with the remainder serviced through conventional sewerage collection systems.



4. Demand forecasting

The forecasting of demand is a key input into capital and operating expenditure decisions, while also providing information for pricing and sales revenue. Demand Management Plans form an important part of our Water Netserv Plan. Connection and water volumes purchase estimates for the investigation period are listed below. Connections are calculated at end of June for the period specified.

Table 4.1 – Number of connections

Type	2012/13	2013/14	2014/15
Water	96,185	97,387	99,247
Sewerage	85,796	86,869	88,528

Table 4.2 – Water volumes purchased

Megalitres	2012/13	2013/14	2014/15
Water purchases	20,353	20,347	20,705

The forecast water purchase volumes for 2012/13 were approximately 4% above the 2012/13 budget volumes due to the dry weather conditions experienced in the first half of 2012/13. Average annual rainfall was assumed for 2013/14.

4.1 Water demand

We have a number of programs to support sustainable use of our precious water resource. Water demand management is an important part of providing effective and efficient water and wastewater services for Logan City.

Managing demand is important in order to conserve water during periods of drought, as well as allowing our customers the freedom to consume the water they want to, within reason. By managing how much water is used, we aim to keep capital costs down by deferring the need for infrastructure upgrades as well as preserving our regional water supply sources (dams). Understanding the timing of when water is used, as well as the volume of water used, also helps us to manage water quality.

Our demand management strategies include:

- proactively monitoring consumption to ensure water is available for our community
- delivering educational programs that change community attitudes and behaviours through understanding the benefits of being water-wise
- communicating information about service-related outages, potential detected leaks and addressing customer water quality concerns
- collaborating and engaging with the water industry regionally, to deliver coordinated, consistent messaging across all South-East Queensland communities
- engaging with our business customers to provide each with the skills and understanding to be better water users
- working with regional water supply organisations and the Department of Energy and Water Supply to support water conservation measures
- minimising system losses from our network and storage facilities
- accurately measuring and monitoring water consumption to inform our demand management and infrastructure planning.

To maximise the useful life of our infrastructure, we undertake accurate demand forecasting to determine network requirements and capacity. The amount of water used and the timing of water consumption are important when planning water and wastewater infrastructure. Understanding the diurnal and seasonal demand patterns allows optimisation of trunk infrastructure capacity.

Managing and minimising system leakage (also referred to as water loss) is also critical in preventing wastage and keeping costs down. We are always striving to prevent and minimise system leakage, while ensuring that mitigation and maintenance strategies are economically viable and do not outweigh the cost of the lost water.

Through our water demand management strategies, we aim to ensure a reliable, sustainable supply of water for our households and businesses, and our natural environment.

The main drivers used to determine annual water demand include:

- population growth
- residential vs non-residential customer growth
- level of water restrictions
- water use efficiency
- level of non-revenue water
- pricing and education
- weather.

4.1.1 Population growth

We service a population of approximately 290,000 people, with water services provided to approximately 96,000 properties and sewerage services to 86,000 properties. Of these properties, approximately 95% are residential and 5% non-residential. Growth in connections is expected to be approximately 2.1% on average over the period to 2031.

Population growth estimates have been prepared using medium series projections of estimated resident population provided by the Planning and Information Forecasting Unit (PIFU), and taking into consideration planning documents for growth areas in the city.

4.1.2 Residential vs non-residential

Logan City has a large percentage of residential customers compared to non-residential: residential make up approximately 95% by number and 81% by volume. Non-residential customers are largely commercial in nature, with only a small number of large industrial customers. As a result, demand is largely influenced by residential behaviour and weather conditions. The percentage split between residential and non-residential is expected to be maintained over future years.



4.1.3 Level of water restrictions

South-East Queensland experienced a period of severe water restrictions from 2005 to 2009. This has impacted significantly on water consumption during and since that time. The Queensland Government has removed the permanent water restrictions that were in place since 2009. It is unclear what impact this will have on consumption patterns going forward. A water restriction policy is being developed by the water authorities in South-East Queensland.

4.1.4 Water efficiency

During the drought, a number of measures also impacted on demand, including mandating water-efficient fixtures in new developments and retrofitting water-efficient fixtures in existing houses. Recently, Council approved a move to make water tank installation no longer a requirement in new developments. In addition, potable water can now be used on construction sites, whereas previously it was a requirement to use recycled water. The recent policy changes are likely to have an impact on increasing demand in future years.

4.1.5 Level of non-revenue water

We reconcile water purchases and consumption billed to customers on a quarterly basis to calculate the volume of non-revenue water and associated percentage of water purchases. Non-revenue water has been applied at 6.0% for the 2013/14 and 2014/15 period.

Logan introduced a Pressure and Leakage Program in 2006 as a water conservation measure in response to a long period of drought. This program included the planning, implementation, commissioning and ongoing operation of district metered areas (DMAs).

A reporting facility was established at a DMA level in previous years to provide leakage assessment at a more detailed level and provide a more robust assessment of water losses. A review is currently being undertaken to provide more frequent and accurate reporting to isolate leakage and target areas for further investigation and network operations activities.

4.1.6 Education

We run a School Watersaver Education Program, which encourages students to work towards a sustainable water future. The program highlights the value of water on a global and local scale, and addresses water as a valuable resource, sources of water, using water wisely, alternative water source and sustainability.

4.1.7 Weather

Weather conditions have a major bearing on demand. This is largely due to our high percentage of residential customers. Dry weather increases the level of demand by consumers, particularly for outdoor use, with a corresponding reduction in wet weather periods. This was particularly evident in 2012/13 where dry weather was experienced in the first six months and wet weather in the second six months. Hydrant standpipe usage in particular is very high in dry weather. Trickle feed customers in rural areas have very low usage in wet weather periods as water tanks are regularly being refilled by rain water, whereas high usage levels are experienced in dry weather because there is a constant need to draw on the water network as water tank levels are low. As a result, weather impacts can nullify other growth factors or alternatively result in usage being beyond expectations.

Information on future weather trends is obtained from the Bureau of Meteorology website, particularly in regard to average rainfall, sea temperatures and forecasts for future years.

4.2 Sewerage demand

A forecast of sewerage volumes is not undertaken for revenue purposes as volumes are not required for billing customers as customer sewerage charges are pedestal based.

4.3 Demand forecasting for capital planning

Demand forecasts are used to plan capital expenditure programs. Inputs for these forecasts include projected population, the requirements of the planning scheme, level of residential versus non-residential customers and estimated consumption.

Reduction in usage levels have had a major bearing in water network augmentation going forward with many anticipated capital projects being delayed by a number of years.

The introduction of the South-East Queensland Design and Construction Code has influenced the level of demand to be taken into account in planning future infrastructure.



5. Capital expenditure

5.1 Drivers for growth

South-East Queensland's population is expected to reach 4.4 million people by 2031, an increase of 1.6 million over the next 20 years. An additional 754,000 dwellings will be required by 2031 to accommodate this growth.

The Queensland Government's South East Queensland Regional Plan 2009-2031 (SEQ Regional Plan) is a statutory instrument that seeks to proactively manage regional growth in the most sustainable way to protect and enhance quality of life in our region. It identifies sufficient land to accommodate the projected population and contains the preferred settlement pattern for the region. The SEQ Regional Plan provides the framework within which we plan and manage our city's future growth.

By 2031, the projected population of Logan is expected to be more than 420,000 people. To manage this growth, Logan is to accommodate 70,000 new dwellings. Of these new dwellings, about 28,000 can be located in the existing urban area and about 42,000 in greenfield areas.

Table 5.1: Population projections for Logan City

Projected population					
Year	Low	Medium	High	Five years to 30 June	Average annual change (medium series)
2016	303,209	316,866	345,417	2016	2.1%
2021	329,198	351,382	402,303	2021	2.1%
2026	354,768	386,962	459,410	2026	1.9%
2031	381,385	425,918	518,750	2031	1.9%



5.2 Coordinated infrastructure to service growth

There is a strong link between the SEQ Regional Plan, South East Queensland Infrastructure Plan and Program (SEQIPP), the Logan Planning Scheme and the Water NetServ Plan. Together, the plans coordinate planning, infrastructure and service delivery in Logan. Developing regionally significant growth areas in Logan will depend on timely delivery of state and local infrastructure, particularly water and wastewater, road and public transport infrastructure.

Growth in Logan can only occur with timely delivery of state and local infrastructure. This infrastructure and associated services need to be planned, coordinated and delivered to support the regional settlement pattern and desired community outcomes. Water and wastewater in particular will be an important focus across our region. In this way, we can create a more sustainable region, while ensuring a safe and reliable drinking water supply and providing wastewater services that protect public and environmental health.

It is important future water infrastructure is identified and planned to support the state government's preferred settlement pattern, and provide greater certainty for development as recognised in the SEQ Regional Plan and the Logan Planning Scheme. The use of infrastructure programs to support and direct development can substantially influence the preferred settlement pattern and urban form. This includes broad-hectare areas, urban infill and redevelopment sites and activity centres. The location and timing of infrastructure delivery can also drive economic development activities and the distribution of employment opportunities.

To meet this need, we have developed an approach to infrastructure planning and programming to provide efficient, cost-effective, safe, functional, well-integrated and sustainable infrastructure. This can be achieved through the efficient use of existing infrastructure, minimising the need for new infrastructure, and the efficient sequencing of development and infrastructure networks to support growth.

5.3 The process of planning for the future

5.3.1 Regional and local planning

We undertake planning activities for water and wastewater to meet legislative and business obligations and to ensure consistency and coordination between Council and the state government. Both levels of government undertake water planning to ensure sufficient water is supplied to support a comfortable, sustainable and prosperous lifestyle, while meeting the needs of urban, industrial and rural growth, and the environment.

The SEQ Regional Plan sits within the Queensland land use planning framework and reflects and informs state planning policy and priorities. It also informs local government plans and policies and non-statutory processes, such as planning for natural resource management, urban renewal and new growth areas at district and neighbourhood levels.

The draft SEQ Water Strategy provides a planning framework for bringing on supplies at appropriate times to meet projections of normal demand, and options for filling a potential short-term gap in supply. The *Water Act 2000* establishes a system for the planning, allocation and use of water. Sustainable management under the Act requires that water be allocated by the state government for the wellbeing of the people of Queensland and the protection of the biological diversity and health of natural ecosystems, within limits that can be sustained indefinitely.

The Regional Water Security Program will detail supply and demand measures required to achieve water security for the region. It is guided by sub-regional planning, and can specify key water cycle objectives that must be reflected in land use and infrastructure planning. Within this framework, we ensure local water and wastewater infrastructure and services are sufficient to support planning and development.

Like all councils in the region, we prepare our Planning Scheme in accordance with the *Sustainable Planning Act 2009* to integrate land use planning and future infrastructure. Logan City currently has three Planning Schemes covering its geographic area (as a result of the 2008 Local Government Reform process): the Logan Planning Scheme, the Gold Coast Planning Scheme and the Beaudesert Planning Scheme.

The three current Planning Schemes are in the final stages of consolidation into a single, new Planning Scheme unique to Logan City. This new Planning Scheme will provide a land use framework for the entire city, as well as provide streamlined and efficient application processes and assessment rules. Less red tape will mean time and cost savings. The Priority Infrastructure Plan (PIP) is a key component of the Planning Scheme.

5.3.2 The Priority Infrastructure Plan

The Priority Infrastructure Plan (PIP) is part of the Planning Scheme. It aims to:

- integrate land use and infrastructure planning
- ensure future infrastructure is planned and provided in an efficient and orderly manner.

The PIP aims to minimise the cost to ratepayers by planning and providing infrastructure in an efficient, coordinated and orderly way. One way to achieve this is to promote development at locations where the existing infrastructure has spare capacity.

In broad terms, the PIP comprises:

- the Priority Infrastructure Area (PIA) – identifying the geographic area intended to accommodate between 10 and 15 years' projected development
- planning assumptions – projecting future demand for trunk infrastructure
- desired standards of service – setting the preferred standard of performance for the networks
- plans for trunk infrastructure – identifying both existing and future trunk infrastructure items.

In essence, the PIP details what, where and when water supply and wastewater trunk infrastructure is required. The PIP supports Council in meeting the city's future water and wastewater needs by ensuring the two networks are provided in a coordinated way with other infrastructure networks.

For water and wastewater services in particular, the PIP:

- details infrastructure planning for the community
- identifies the future infrastructure needs
- enables services and facilities to be provided more efficiently and cost effectively
- enables current and future residents to be supported by high quality infrastructure
- helps manage the city's growth
- provides the framework for ongoing development, which in turn encourages investment.

5.3.3 Planning assumptions

Planning assumptions are critical as they define the type, location, scale and timing of existing and projected future development within the city. These assumptions are converted into demand for the various networks which, together with the desired standards of service, provide the basis for network planning.

Council's planning assumptions are based on the provisions of the Planning Scheme, as well as projections developed by the Australian Bureau of Statistics, and the Office of Economic and Statistical Research in Queensland Treasury. Our planning assumptions are expressed in quantitative terms, and generally provide information on:

- existing and projected population
- existing and projected employees
- existing and projected dwellings
- existing and projected non-residential floor space
- existing and projected net developable area.

5.4 Plans for infrastructure

Water and wastewater infrastructure planning ensures our city's infrastructure networks continue to provide efficient and affordable services to the Logan community, while providing for development and growth.

Infrastructure planning ensures our customer's needs are met by:

- maintaining standards of service for water supply and wastewater collection and treatment
- providing capacity in the water and wastewater systems for local and regional growth
- providing a safe and reliable drinking water supply
- managing wastewater treatment and treated effluent
- protecting the environment and waterways by optimising the wastewater collection system and minimising overflows
- improving water efficiency by reducing in-system leakage, managing pressure, improving the system, and improving water conservation
- renewing and replacing ageing infrastructure.

We follow a rigorous planning framework to ensure optimal water and wastewater system requirements are met. This framework forms the basis of ongoing investment in infrastructure. Developed servicing strategies ensure the timely provision of infrastructure to meet the desired standards of service and our customer expectations.

Whole-of-city strategic and master planning takes a long-term view of the city's water and wastewater needs, providing the basis for future capital works programs for up to 40 years.

At the next level, catchment-based planning determines the most appropriate infrastructure solutions through analysis of various options to meet current and future needs. At this level, planning assumptions such as population growth, future land use, employment growth, development timing and resulting demand are confirmed by local and state planning documents.

All associated impacts and benefits of alternatives are considered in this planning phase, including non-infrastructure solutions. This ensures decisions about infrastructure investment are not only based on price, but also consider non-cost factors including social equity and environmental issues. Planning considerations include:

- total water cycle management planning
- full-life cycle costs, sustainability and triple bottom line considerations
- non-asset solutions
- operational improvements
- risk
- maximising existing infrastructure life
- flexibility in servicing strategies to provide for uncertainties.

At the next level, detailed asset planning for specific infrastructure items ensures all infrastructure solutions are efficient and cost-effective. This creates a basis for designing and constructing infrastructure to meet the needs of current and future customers.

5.4.1 Capital planning process

Demand forecasts are established on the basis of our population model, where populations are converted into units of demand. Ultimate loads under the fully developed Planning Scheme are determined and then used to calculate demand loads across planning horizons in five year increments.

These demand scenarios are key inputs to water and wastewater hydraulic network models. The models are run for existing and future demand, and tested for sensitivity to changes in underlying assumptions, for example variations in per unit demand. This process identifies both existing system performance deficiencies (level of service failures) and future infrastructure requirements. It also helps ensure inappropriate investments are avoided.

5.4.2 Renewals planning process

The majority of Logan City's water and wastewater assets were developed from the 1970s to 1990s. As the network ages, greater levels of maintenance and capital expenditure is required to replace assets and continue to meet service standards.

Council undertakes regular asset condition assessments and risk analyses, combined with asset performance, to determine which assets require replacement over the coming years.

5.4.3 Capital investment program development

We have developed our capital programs to take into account the need to provide for growth and renew assets as they fall due, identify opportunities for network improvements and efficiency gains, and ensure compliance with legislative requirements.

While the systematic approach to capital programming provides us with a strategic basis of infrastructure investment to support predicted growth, we recognise that planning is based on many high level assumptions. To ensure proposed infrastructure is both necessary (prudent) and cost effective (efficient), proposed investments are tested against the underlying assumptions and their need and timing verified.

Through a formal procedure, proposed capital projects must ‘qualify’ for programming into the capital works program, irrespective of business driver. The Capital Works Program Development Procedure has been established as the framework to detail the following for each proposed investment:

- detailed project definition and business case
- demonstrated prudence of the proposed investment
- demonstrated efficiency of the proposed investment
- project change register.

Through these processes, the capital program is constantly adjusted to bring forward, defer, include or delete projects to ensure the right investment is made at the right time, at the right cost.

5.4.4 Prudent and efficient investment

On an annual basis, the developed capital works program proposed for Council adoption is subject to an independent audit to ensure compliance to the QCA prudence and efficiency test. To date, all projects subject to the audit have been deemed prudent and efficient by the auditor.

5.4.5 Water supply and wastewater investment

We have identified approximately \$457 million in investments in water and wastewater infrastructure up to 2021/22 to support growth. This includes investment in water storage reservoirs, pipes, pump stations, water meters, wastewater treatment plants and network control and monitoring systems.

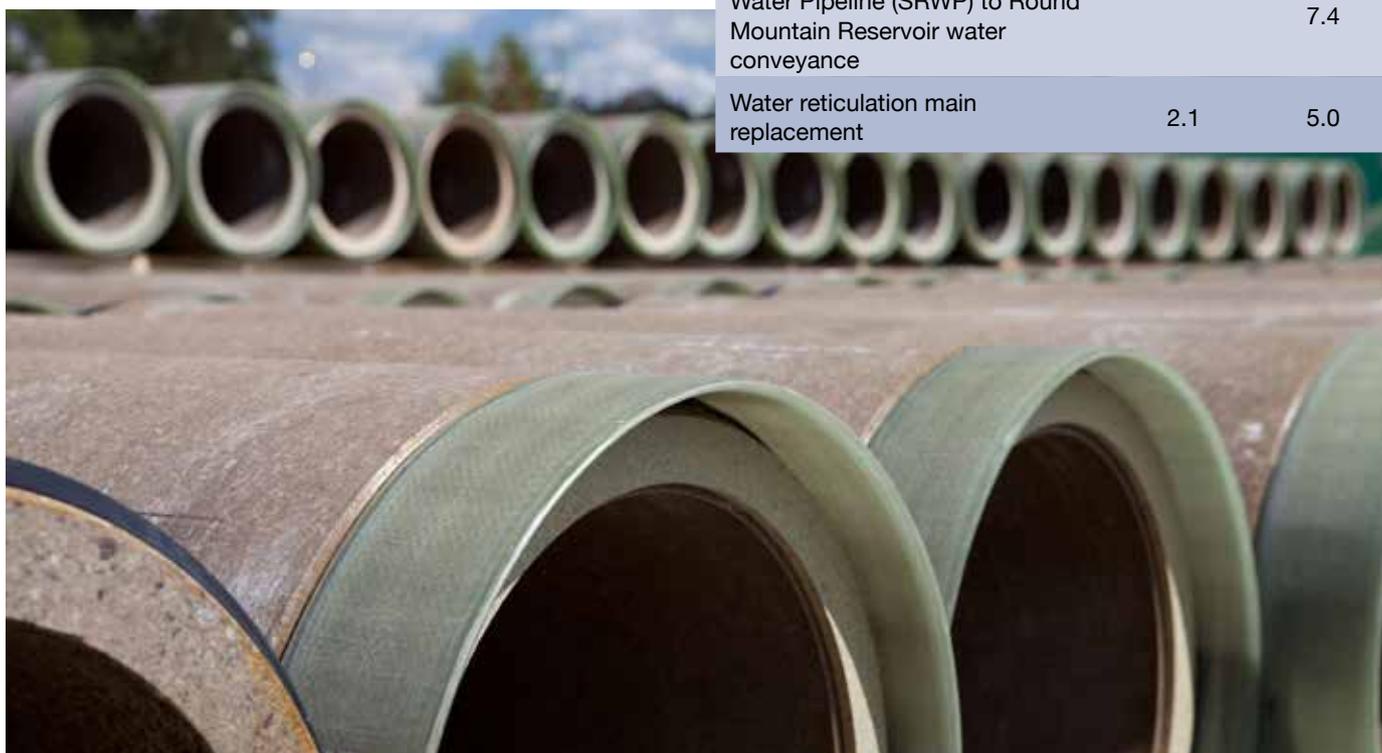
5.4.6 Capital expenditure tables

Table 5.2 – Actual expenditure by category

Category	2012/13 \$m	2013/14 \$m	2014/15 \$m
Growth	33.2	31.7	22.3
Renewals	12.1	20.8	26.3
Improvements	20.4	19.9	7.0
Compliance	2.5	2.3	0.4
Total	68.2	74.7	56.0

Table 5.3 – Key project forecast expenditure

Projects	2013/14 \$m	2014/15 \$m
SEWERAGE		
Alfred St to Loganholme Water Pollution Control Centre (LWPCCC) rising main augmentation	27.7	
Chambers Flat Rd Pump Station to Princess St Marsden wastewater conveyance	6.2	11.2
LWPCCC inlet works and bypass	12.4	
SPS108 rising main augmentation	1.1	4.7
Crestmead trunk main augmentation		6.2
WATER		
New Beith Southern Regional Water Pipeline (SRWP) to Round Mountain Reservoir water conveyance		7.4
Water reticulation main replacement	2.1	5.0



6. Operating expenditure

Operating costs provided in the submission for 2013/14 and 2014/2015 are as published in the 2013/14 Budget as approved by Council. Information for 2012/13 is based on a forecast used at the time of the preparation of the 2013/14 Budget and associated price determination.

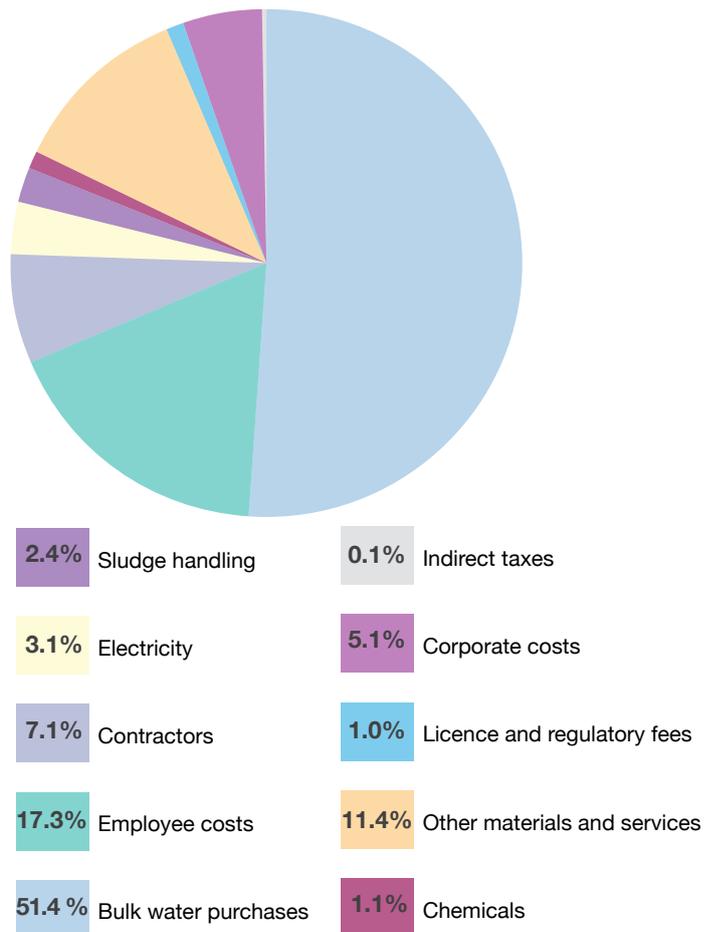
Our operating expenditure is expected to be \$105.1 million for the 2013-14 year.

Table 6.1 – Operating expenses

Expense category	2012/13 \$m	2013/14 \$m	2014/15 \$m
Bulk water purchases	48.5	54.0	59.5
Employee costs	17.1	18.2	19.0
Contractors	4.7	7.5	7.7
Electricity	2.4	3.3	3.6
Sludge handling	2.3	2.5	2.5
Chemicals	1.0	1.1	1.2
Other materials and services	12.1	12.0	12.3
Licence and regulatory fees	0.2	1.0	1.0
Corporate costs	4.6	5.4	5.6
Indirect taxes	0.2	0.1	0.1
Total	93.1	105.1	112.5



Table 6.2 – Share of 2013/14 operating costs



6.1 Operating expenditure categories

6.1.1 Bulk water purchases

We purchase treated water from Seqwater, a state-owned bulk water supplier. This water is distributed through our network to consumers. Bulk water purchased for the 2013/14 year is anticipated to be 20,347 ML. Bulk water forecasts include projected increases in volume and a non-revenue water component. The price of bulk water for 2013/14 and 2014/15 was based on the previous bulk water price path. The adjustment to bulk prices was advised by the Queensland Government in May 2013. An adjustment was not made to the budgeted value because of the materiality of the adjustment. The increase in the charge for 2013/14 consists of an increase of 11.3% in the bulk price, a 3% growth in volumes to the 2012/13 budget volumes and a 1% increase in non-revenue water. Note that the forecast 2012/13 volumes were approximately 4% above the 2012/13 budget volumes. A net increase of 10.2% was applied for the 2014/15 bulk water expenditure.

6.1.2 Employee costs

Employee costs have been budgeted based on 241 full-time equivalents. There has been no increase in staff forecast for the 2013/14 and 2014/15 period. Increases in labour rates have been based on the Logan City Council Certified Agreement 2012 remaining in force until 31 December 2014. Employee costs have been allocated to operating costs and capital expenditure in accordance with work undertaken. An increase of 3.5% has been applied in 2013/14 and 4% in 2014/15.

6.1.3 Contractors

A contractor refers to persons or a team of people providing services, which are not directly employed by the business. This includes agency staff and consultants. Forecast costs are based on work planning for the different areas of the business. An increase of 2.2% has been applied to 2013/14 and 3% to 2014/15.

6.1.4 Electricity

Electricity charges relate to power costs associated with operating water and sewage pump stations, sewage treatment plants, plant and buildings. Large contestable sites are subject to a single contract with the remainder of sites charged in accordance with the standard tariff. A growth component, weather impact component and projected movement in retail charges have been incorporated in estimated charges. An increase of 28.6% was applied to 2013/14, incorporating growth, retail price increase and carbon tax increase. An increase of 9.6% has been applied to 2014/15.

6.1.5 Sludge handling

This represents the transport of treated sewage sludge or biosolids offsite after the sewage treatment process has been completed. Forecast expenditure is impacted by growth in the quantity of biosolids, based on the growth in connections. Charges are based on a supplier contract, with increases associated with contract conditions or subject to anticipated movements in price associated with tendering for a new contract. An increase of 9.25% has been applied in 2013/14 and an increase of 3% in 2014/15.

6.1.6 Chemicals

Chemicals are predominantly used in the sewage treatment operations with smaller amounts used in water operations and laboratory services. Chemical forecast costs have been anticipated to increase by 2.2% based on a fixed parameter set by Council with no component for growth. An increase of 4% has been applied in 2014/15.



6.1.7 Other materials and services

This represents categories of expense that are not captured in the other categories. Forecast costs for individual items are separately budgeted with the fixed parameter for materials and services of 2.2% applied. An increase of 4% for materials and 3% for services has been applied in 2014/15.

6.1.8 Licence and regulatory fees

This category represents fees to be paid to QCA, Department of Environment and Heritage Protection, Healthy Waterways and the Energy and Water Ombudsman Queensland. Forecasts vary depending on supplier.

6.1.9 Corporate costs

Council provides corporate services to the water business in accordance with a service level agreement. An agreed annual charge is included in the water business operating expenditure for undertaking this service. A corporate cost allocation methodology has been applied that allocates the expenditure for services performed to water business products. Services include those provided by the following Council branches: Administration and Risk Management, Record Management, Finance, Information Services, People and Culture, Community Engagement and Marketing, Outcomes and Performance and Customer Service. Cost allocation also includes Directorate overheads. For 2013/14, corporate costs were developed from first principles due to the return of the water business from Allconnex Water on 1 July 2013. An increase of 2.1% has been applied in 2014/15.

Competitive neutrality adjustments in accordance with the Code of Competitive Conduct section of the *Local Government Act 2009* have been applied.

6.2 Other

6.2.1 Cost allocation by product

We have developed an allocation of revenue and costs between products at activity level, based on the work undertaken on each product. Products include water, sewerage, trade waste and non-regulated services. Corporate costs have been allocated based on revenue.

6.2.2 Non-regulated services

We have a laboratory that undertakes scientific testing, including water testing and related services for external and internal customers. This service has been treated as non-regulated as per the definition. The costs associated with operating the laboratory have been excluded from Table 6.1 – Operating expenses. Charges billed to water, sewerage and trade waste services by the laboratory are included in Table 6.1.



7. Maximum allowable revenue

Maximum allowable revenue has been calculated under the building block framework. Comments on individual components as well as the calculation are shown below.

7.1 Regulatory asset base

The regulatory asset base (RAB) was originally created with the establishment of Allconnex Water on 1 July 2010. This was a combination of the RABs for the water businesses of Logan City Council, Gold Coast City Council and Redland City Council. This combined RAB was then adjusted as a result of Allconnex Water additions, depreciation, disposals and indexation for financial years 2010/11 and 2011/12. Following the winding up of Allconnex Water, the RAB at 30 June 2012 was then dissected into the individual council components for transfer back to the three council water businesses.

Information on the Logan component of the combined Allconnex Water RAB for the year ended 30 June 2011 and 2012 is not available. As a result, the RAB value transferred back from Allconnex Water has been treated as the opening RAB for commencement of the Logan City Council water business on 1 July 2012.

The RAB transferred from Allconnex Water has been advised at \$1,152,090,967, which has been allocated to water and sewerage assets. Regulatory depreciation is calculated based on a straight line methodology using the valuation divided by the remaining life of the individual assets for the transferred RAB assets.

Additions and disposals for the 2012/13 year have been processed with a 30 June 2013 date.

There are a number of work-in-progress projects transferred from Allconnex Water that were capitalised or commissioned in 2012/13. These have been shown in 5.6.2 in the data template.

7.2 Depreciation

Depreciation is calculated on a straight-line basis for individual assets attached, based on asset lives. Asset lives for assets included in the transferred RAB are lower than new additions for 2012/13 as the assets transferred have a reduced remaining life as they were part of the way through their useful life.

7.3 Indexation of asset base

The indexation rates applied are 2.1% for 2012/13 in accordance with CPI Brisbane All Groups March to March and 2.5% for 2013/14 and 2014/15 as per the information requirements.

7.4 Contributed, donated and gifted assets

Table 7.1 – Contributed and donated assets

Product	Category	2012/13 \$m	2013/14 \$m	2014/15 \$m
Water	Developer contributions	6.1	2.5	2.2
	Donated assets	6.8	7.0	6.8
Sewerage	Developer contributions	6.6	9.5	8.4
	Donated assets	7.2	7.3	7.2
Total		26.7	26.3	24.6

7.4.1 Donated assets

Donated assets are largely network infrastructure installed in local subdivisions. Some donated assets may be received where a developer builds trunk infrastructure subject to an infrastructure agreement between Council and the developer. Work of this nature may be offset against infrastructure charges.

Forecasting of donated assets is undertaken by applying expected increases in growth rates and movements in the construction cost of installing infrastructure. Generally, historical trends and future economic conditions (regarding future development) are also taken into account.

7.4.2 Developer contributions

Forecasts of developer contributions are largely based on historical trends, future economic conditions, development approvals and anticipated changes in legislation in relation to charges per lot. In some cases, trunk infrastructure can be funded by a developer under an infrastructure agreement with associated funding treated as cash contributions.

7.4.3 Gross vs asset offset approach

The asset offset approach has been applied to the treatment of contributed, donated and gifted assets. This aligns with the previous treatment used by Allconnex Water.

7.5 Return on capital

The Weighted Average Cost of Capital (WACC) advised by QCA of 6.57% for the two-year monitoring period has been used for calculation of pricing.

Parameters	Value
Risk-free rate	2.76%
Market risk premium	6.0%
Capital structure (% debt)	60.00%
Debt beta	0.11
Asset beta	0.35
Equity beta	0.66
Cost of equity	6.69%
Debt margin	2.29%
Total debt margin	3.73%
Cost of debt	6.49%
Post tax nominal WACC	6.57%

7.6 Revenue requirement

7.6.1 MAR Calculation

The calculation of maximum allowable revenue (MAR) has been based on QCA's building block methodology. This calculation is shown below in Table 7.2

Table 7.2 – Maximum allowable revenue

	2012/13 \$m	2013/14 \$m	2014/15 \$m
Operating cost	93.1	105.1	112.5
Depreciation	31.8	32.5	34.3
Return on assets	77.1	79.3	88.8
Indexation	-24.1	-29.5	-32.9
Net tax	10.1	11.4	12.2
Total	188.0	198.8	214.9

7.6.2 Utility revenue

Utility revenue represents revenue received from water and sewerage charges (including trade waste), fees and charges and other income. This excludes capital revenues, investment interest revenue and non-regulated services revenue.

Table 7.3 – Revenue by category

Category	2012/13 \$m	2013/14 \$m	2014/15 \$m
Water charges	89.3	99.7	108.8
Sewerage charges	62.7	72.4	75.9
Fees and charges	3.6	3.2	3.2
Other income	4.7	4.4	4.2
Total	160.3	179.7	192.1

7.6.3 Non-regulated revenue

We have treated laboratory services as a non-regulated service. The laboratory performs National Association of Testing Authorities (NATA)-accredited chemical and microbiological testing service for water and wastewater. The laboratory monitors the water quality of the Logan water supply network and product quality of the Logan sewage treatment plants, and tests trade waste samples. Revenue from external and internal laboratory services is included in the Table 7.4 below.

Table 7.4 – Non-regulated revenue

Category	2012/13 \$m	2013/14 \$m	2014/15 \$m
Laboratory	1.1	1.1	1.2

7.6.4 Comparison of revenue to MAR

Table 7.5 - Revenue recovery against MAR

	2012/13 \$m	2013/14 \$m	2014/15 \$m
Maximum allowable revenue	188.0	198.8	214.9
Utility revenue	160.3	179.7	192.1
Under (over) recovery	27.7	19.1	22.8

