



QUEENSLAND
UrbanUtilities



Water Netserv Plan *Part A*

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EXECUTIVE SUMMARY

Queensland Urban Utilities was officially established as a statutory authority on 1 July 2010. The organisation is owned by the Brisbane and Ipswich City Councils, and the Lockyer Valley, Scenic Rim and Somerset Regional Councils. It is governed by an independent board.

Our primary role is to deliver drinking water, recycled water, and wastewater services to the cities and townships within the boundaries of those five council areas. We are one of the largest water distributor-retailers in Australia, supplying water to 1.3 million residents each year, and collecting and treating wastewater.

Under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009*, distributor-retailers are required to have a Water Netserv Plan (Plan) in place by 1 July 2013. Our Plan will be finalised following the release of regulations that support the Act. In the meantime, this Plan has been prepared to cover the period between 1 July 2010 and the completion of our first formal Water Netserv Plan.

This Water Netserv Plan provides an overview of our infrastructure planning and development for the next 20 years, and is critical to meeting our commitment to our customers. It supports and reflects the land use planning undertaken by the Queensland Government and the five councils.

The Plan is presented in two parts. Part A provides an overview of our water and wastewater networks and services, and broadly describes our system. It outlines our planning assumptions, how we contribute to sustainability, our emergency response measures, Customer Service Standards, connections policy, and key infrastructure projects planned to support population growth in the region. Part B provides an overview of our operating framework, processes, performance and management functions.

The Plan will be a key document for future streamlined asset management and economic regulation, bringing together a number of asset- and planning-related activities, such as strategic asset management plans and priority infrastructure plans.

The Plan will be reviewed every 5 years in accordance with the Act. However, if circumstances arise which significantly impact on Queensland Urban Utilities' operations, capital investment plan or strategic direction, a review of the Plan will be undertaken.

The Plan will form a key component of our infrastructure pricing submission when the industry moves into full economic regulation on 1 July 2013.



The Water Netserv Plan provides an overview of our planning and development for the next 20 years, and is critical to meeting our commitment to our customers.

Healthy waterways are a vital part of enjoying the outdoors.



PART A – STRATEGIES, INFRASTRUCTURE AND CHARGING

I. QUEENSLAND URBAN UTILITIES

1.1 Who we are

Queensland Urban Utilities is one of three council-owned statutory authorities (along with Unitywater and Allconnex Water). The primary functions of the three entities are to provide water distribution and wastewater collection and treatment, and retail services to the South East Queensland community.

Queensland Urban Utilities' service area is defined by the boundaries of our participating councils:

- Brisbane City Council
- Ipswich City Council
- Lockyer Valley Regional Council
- Scenic Rim Regional Council
- Somerset Regional Council.

1.2 Our stakeholders

Queensland Urban Utilities places great importance on engaging with stakeholders who rely on our services and contribute to the way we do business. Queensland Urban Utilities continues to strengthen our current relationships with the community, industry and government bodies to improve the way we operate.

At a strategic level, our affiliations with local and state government departments allow us to keep abreast of legislation and regulations, and ensure we continually fulfil our responsibility to protect the environment and support sustainable practices.

Within the industry, our relationships with our fellow distributor-retailers (Unitywater and Allconnex Water), developers, suppliers, and environmental and community reference groups allow us to collaborate at a local level to work towards common goals.

Engaging directly with the community provides us with immediate feedback on our customers' needs. It is at this level that we are able to create greater awareness of who we are, how we provide our services, and what to expect in the future in the way of new infrastructure and pricing.

1.3 Our relationship with the councils

Queensland Urban Utilities is a merging of the water and wastewater businesses of the five participating councils, who now act as owners and partners in the development of regional water and wastewater infrastructure.

Consistent with other government-owned businesses, councils will be entitled to a return on investment, as determined by the Queensland Urban Utilities Board in accordance with a Participation Agreement between the five councils and Queensland Urban Utilities.

Queensland Urban Utilities, as a statutory authority, functions under Queensland legislation and operates independently from the councils. Nonetheless, we retain and embrace key philosophies of our participating councils including:

- servicing key growth areas as designated by local government planning schemes and the SEQ Regional Plan
- maintaining an ongoing commitment to the continued provision of high-quality water supply and wastewater services
- recognising the need to build and maintain a skilled workforce to support our business
- maintaining the value of the existing water and wastewater business in a total water cycle management context
- recognising that, in making capital investment decisions and in setting standards of service into the future, consideration will be given not only to price, but also to social equity and environmental issues.

1.4 Our relationship with our customers

Queensland Urban Utilities has prepared a Customer Charter that outlines our commitment to delivering water and wastewater services to our customers.

Queensland Urban Utilities works to improve the quality of life of the people of South East Queensland.

Specifically the charter outlines:

- our customers' rights and obligations
- information about the relevant services performed by us
- information about our Hardship Policy
- how we will deal with complaints and disputes.

The Charter is available on our website, www.urbanutilities.com.au

We have also developed a set of Customer Service Standards, which are described in detail in Chapter 6 of this Plan. Our Customer Service Standards are also available on our website.

1.5 Our role in the SEQ Water Grid

The SEQ Water Grid is a Queensland Government initiative comprised of an infrastructure network of treatment facilities and two-way pipelines to improve water security and provide an integrated approach to managing water across the region.

Queensland Urban Utilities purchases bulk water from the SEQ Water Grid Manager. The SEQ Water Grid Manager is a government-owned statutory body, responsible for the strategic operation of the SEQ Water Grid consistent with:

- the South East Queensland System Operating Plan
- the SEQ Water Market Rules
- associated legislative and regulatory documents.

The SEQ Water Grid Manager owns the urban water entitlements and instructs water production and transport actions across South East Queensland. It sells raw water, drinking water and purified recycled water to Queensland Urban Utilities, Allconnex and Unity Water, and to power stations, and other industrial and rural businesses.

Planning and delivery of water infrastructure across South East Queensland requires a collaborative effort by all grid participants. Queensland Urban Utilities is

committed to working closely with the SEQ Water Grid Manager to ensure our approach contributes to achieving regional outcomes for customers across South East Queensland. Our primary areas of focus relate to:

- reliability of supply – ensuring minimal interruption to customers' water supply
- water quality – understanding the water quality requirements throughout the grid, how this is monitored and managed, and the processes in place to respond to incidents or customer complaints
- population growth – understanding where new growth and developments will occur supports the planning process and provides greater confidence in meeting our customers' expectations
- water demand forecasts – understanding how water is used in terms of the volume and change in usage patterns supports infrastructure planning, operational aspects and water pricing
- purified recycled water – understanding the market opportunities to supply recycled water to commercial, industrial and rural customers, thereby reducing the demand on the drinking water supply
- emergency response management – ensuring a coordinated response to emergencies to minimise interruptions to services, customer impacts and environmental pollution.

Figure 1 overleaf shows our relationship with the other participants of the SEQ Water Grid. The bulk water entities are owned by the Queensland Government, and were established on 1 July 2008 following the purchase of bulk water assets from councils.

1.6 Our role in land use and infrastructure planning

As a major infrastructure provider, Queensland Urban Utilities has an important role in land use and infrastructure planning undertaken by state and local governments. Land use and infrastructure planning is part of a regulatory framework in which powers, processes, and roles and responsibilities are defined in detail by the *Sustainable Planning Act 2009* and associated regulations.



Members of our team working together.

Before 1 July 2010, land use and infrastructure planning with water businesses was carried out within councils. Given it will not be possible to establish integrated water and wastewater infrastructure plans, development standards and supporting systems immediately, transitional arrangements relying on existing planning documents and council processes are required. These will form the basis of land use and infrastructure decision-making processes undertaken on behalf of Queensland Urban Utilities.

Councils are responsible for local land use planning and stormwater services planning, while Queensland Urban Utilities is responsible for water and wastewater services planning, infrastructure and other related functions.

Until 30 June 2013, councils will be assessing and determining development applications on behalf of Queensland Urban Utilities. From 1 July 2013, a new arrangement, yet to be determined, will be in place.

As part of the referral agency delegations, Queensland Urban Utilities is supporting the following principles.

- Our participating councils continue to provide land use planning, infrastructure planning and development assessment services on behalf of Queensland Urban Utilities during the transition period.
- Queensland Urban Utilities provides supporting land use and infrastructure planning and development assessment services to councils during the transition period, and the supporting services provided generally reflect those services provided by previous council water businesses.

1.7 Our relationship with our regulators

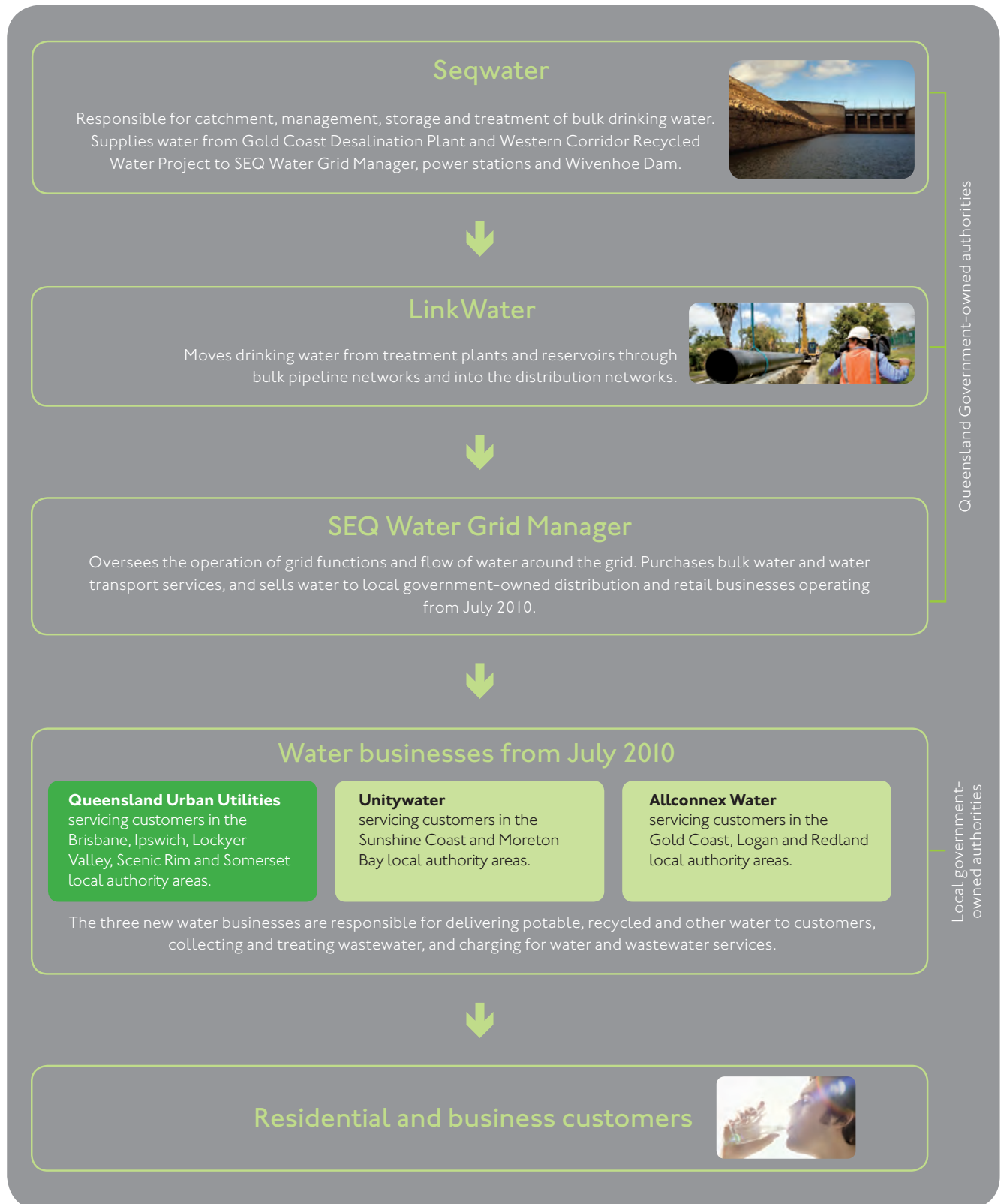
To ensure the sustainability of the water industry in South East Queensland, the Queensland Government has committed to a high-level of economic regulation and infrastructure planning for the new distribution-retail entities. The Queensland Competition Authority will monitor Queensland Urban Utilities' water and wastewater pricing until 30 June 2013. Beyond 2013, the role for the Queensland Competition Authority in pricing is not yet determined.

The ultimate pricing structure applied to our customers from 1 July 2013 will be determined by our Board and reviewed by the Queensland Competition Authority as part of our pricing submission.

This Plan is also a key element of our future economic and asset management framework. A significant element of the charges passed on to customers reflects the costs of maintaining and, where necessary, replacing existing or constructing new water and wastewater infrastructure. The Plan will be a critical input to the pricing submission and subsequent pricing determination.

The Plan supports a cooperative management approach, with stakeholders involved in development planning activity throughout the region. The Plan will also form part of the basis for our decision-making as part of the wider *Sustainable Planning Act 2009*.

Elements of the Plan also collate other regulatory activities, particularly those relating to drinking water quality and environmental protection activities.

Figure 1 – The SEQ Water Grid participants



Enjoying a picnic in New Farm Park.

2. WATER NETSERV PLAN

The South East Queensland Water (Distribution and Retail Restructuring) Act 2009 requires Queensland Urban Utilities to “have a plan (a Water Netserv Plan) about its water and wastewater networks and providing its water service and wastewater service” from 1 July 2013.

The Plan will become the key strategic document guiding our delivery of infrastructure to support regional and local planning.

Finalisation of Part A of the Plan requires public consultation and endorsement from both the Minister for Planning (to ensure consistency with the South East Queensland Regional Plan) and our five participating councils (to ensure consistency with local government planning assumptions). In accordance with the required legislation, the Plan must be reviewed every five years, with the service areas being reviewed annually. However, should circumstances arise at any time that may significantly impact on Queensland Urban Utilities’ strategic direction or operations, we will undertake a full review of the Plan.

Our overarching goal in preparing this Plan early is twofold. First, it is a step towards compliance with the new regulatory regime. Second, it supports the transition from five council water businesses to the single entity of Queensland Urban Utilities. This Plan provides a snapshot of our water and wastewater infrastructure planning, and brings together a wide range of regulatory compliance information.

The Plan confirms our understanding of, and commitment to continue, high quality water and wastewater infrastructure planning as undertaken by councils prior to 1 July 2010. The Plan also confirms our commitment to comply with relevant regulatory plans prepared by councils for the Queensland Government.



We will ensure we provide safe, reliable and secure water and wastewater services.

2.1 Purpose of this Plan

The key purpose of the Plan is to:

- ensure we provide safe, reliable and secure water and wastewater services
- provide for strategic planning
- provide infrastructure planning for our water and wastewater services for at least 20 years
- provide for the management of our water and wastewater services in a way that seeks to achieve ecological sustainability
- provide a platform for feedback that will guide further research into the requirements of our customers, stakeholders and regulators
- assist in determining the future economic regulation of our organisation.

2.2 Plan structure and content

This document is intended to align with the requirements of Part A of the two-part Plan described in the legislation.

Chapters 1 and 2 provide background and context to the Plan, and information on its purpose and goals. In particular, they describe our relationship with the water industry and our participating councils, and provide details of the intent of the Plan.

Chapter 3 describes some of the regional and local planning processes that we support, and details the planning assumptions we use to understand

and provide solutions for growth, climate change, sustainability, protection of the environment and resilience against natural disasters.

Chapter 4 describes the water, wastewater and recycled water infrastructure assets, which provide the basis for future development of the systems.

Chapter 5 integrates the findings of the preceding two chapters by applying the assumptions for future needs to the present state of the infrastructure. It outlines the key projects we will undertake to build new infrastructure and maintain our present assets.

Chapter 6 outlines the Customer Service Standards customers should expect to receive in each of our districts. These standards guide our asset management regime.

Chapter 7 outlines the general principles which support new connections to our networks, including the areas we are able to service, the circumstances in which we can service new areas, and the criteria we apply in providing new connections.

Chapter 8 provides our schedules for connection, service and infrastructure charges. The inclusion of these charges in the Plan shows the flow of decision-making, drawing on population growth, planning assumptions and existing infrastructure, through to building and maintaining these assets to desired standards, and how costs are passed on to the customer.

Chapter 9 provides a description of Part B of the Plan, which will be published separately to this document. Part B will focus on regulatory compliance and the operational and technical details of the delivery of the direction provided in Part A.



We want to hear from you.

2.3 Information sources

In developing the Plan, Queensland Urban Utilities has drawn on a broad range of information sources including:

- descriptions, guidelines, figures and maps provided by our participating councils and their water businesses including:
 - total management plans and related documentation
 - master plans for water, wastewater, recycled water networks and treatment plants
 - land use planning assumptions made by our participating councils, typically presented in the Planning Scheme Policies in use or current as at 30 June 2010
- region-wide planning assumptions presented in the Queensland Government's South East Queensland Regional Plan 2009–2031
- Connections Policy applying to service areas, declared or practised by the water businesses of our participating councils, and their standards for construction of connecting infrastructure
- schedules of charges for the construction of infrastructure, published or supplied to developers by the councils' water businesses
- various technical documents that support current infrastructure-based compliance with the *Water Act 2000*, the *Water Supply (Safety and Reliability) Act 2008* and the *Environmental Protection (Water) Policy 2009*.

2.4 Consultation and approval of the Plan

This Plan has been subject to the following review process.

- Publish a notice about the proposal to make a Plan.
- Make the Plan available to the public for consultation.
- Invite submissions from the public.
- Consider those submissions and respond to them in the final document.
- Consult directly with key stakeholders within the Queensland Government, participating councils, the water industry, the development industry and community reference groups.

Consultation was completed in July 2011. This document represents Queensland Urban Utilities' responses to the feedback received from all stakeholders. The next step toward formalising this Plan will be to request endorsement, from the Minister for Planning and our participating councils, of its being consistent with the South East Queensland Regional Plan and planning assumptions used within each local government area.





3. OUR PLANNING ASSUMPTIONS – SUPPORTING GROWTH AND SUSTAINABILITY

Queensland Urban Utilities planning assumptions support those in the South East Queensland Regional Plan 2009–2031 and participating councils' planning schemes.

The South East Queensland Regional Plan's purpose is to manage regional growth and change in the most sustainable way to protect and enhance quality of life.

Of particular importance to us are the population and housing projections and the designated urban footprint, and the guidance they provide for development in the region.

The South East Queensland Water Strategy and Regional Water Security Program are two other Queensland Government initiatives that we align our planning assumptions with.

At a local level, we reflect the planning schemes adopted by our five participating councils and total water cycle management plans. It is this information that provides us with the type, size, location and timing of future development and growth.

When making our plans, we are mindful of our Customer Service Standards and plan our infrastructure to not only support growth, but to provide our customers with services that continue to meet the agreed standard.

We also provide strategic and specific input to state and local governments as they update their planning.

South East Queensland's population is expected to reach 4.4 million people by 2031.

3.1 South East Queensland Regional Plan

Over the last 20 years, South East Queensland's population has increased from around 1.5 million people to 2.8 million. It 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 South East Queensland Regional Plan seeks to proactively manage this growth by identifying a preferred settlement pattern for the region, and encouraging more compact infill development. An increased proportion of the region's population, which will be substantially greenfield development, will be located in the Western Corridor around Ipswich, easing growth pressures on the coast.

3.2 Local government planning

Planning schemes

Planning schemes are prepared by local governments to manage growth and change in their local government area for a period spanning 20 years.

Planning schemes:

- focus on land use development, infrastructure and environmental features of the area
- coordinate and integrate community, state, regional and local needs and wants
- outline where development can and cannot occur by identifying land for different uses (e.g. residential, commercial, open spaces)
- identify the kind of development that requires approval.

Planning schemes are used to manage development to ensure, among other matters, that they coordinate with the provision of water and wastewater infrastructure and that all users can receive an acceptable and expected standard of service.

They also allow local government to predict future infrastructure needs, and in conjunction with the *Adopted Infrastructure Charges Resolution*, calculate appropriate charges for infrastructure, including the water and wastewater networks. This is reflected in a planning scheme policy or priority infrastructure plan.

All participating councils are either undertaking a planning scheme amendment program or developing new planning schemes. Queensland Urban Utilities anticipates that the majority of new planning schemes will not come into effect until 2012 or later. We will support the development of the planning scheme content relevant to water and wastewater.

Total water cycle management

Under the *Environmental Protection Act 1994*, local governments in South East Queensland are required to develop a Total Water Cycle Management Plan by 1 July 2012. Total water cycle management refers to an integrated approach to the management of water over its entire cycle. It considers the inter-relationships between water and wastewater networks, stormwater management, regional waterways and catchments, to improve the way water resources are managed throughout the region.

Queensland Urban Utilities will collaborate with our participating councils to develop Total Water Cycle Management Plans as a key input into our strategies and as an important component of the Water Netserv Plan.



Work underway on the Woolloongabba Sewer Capacity Upgrade.

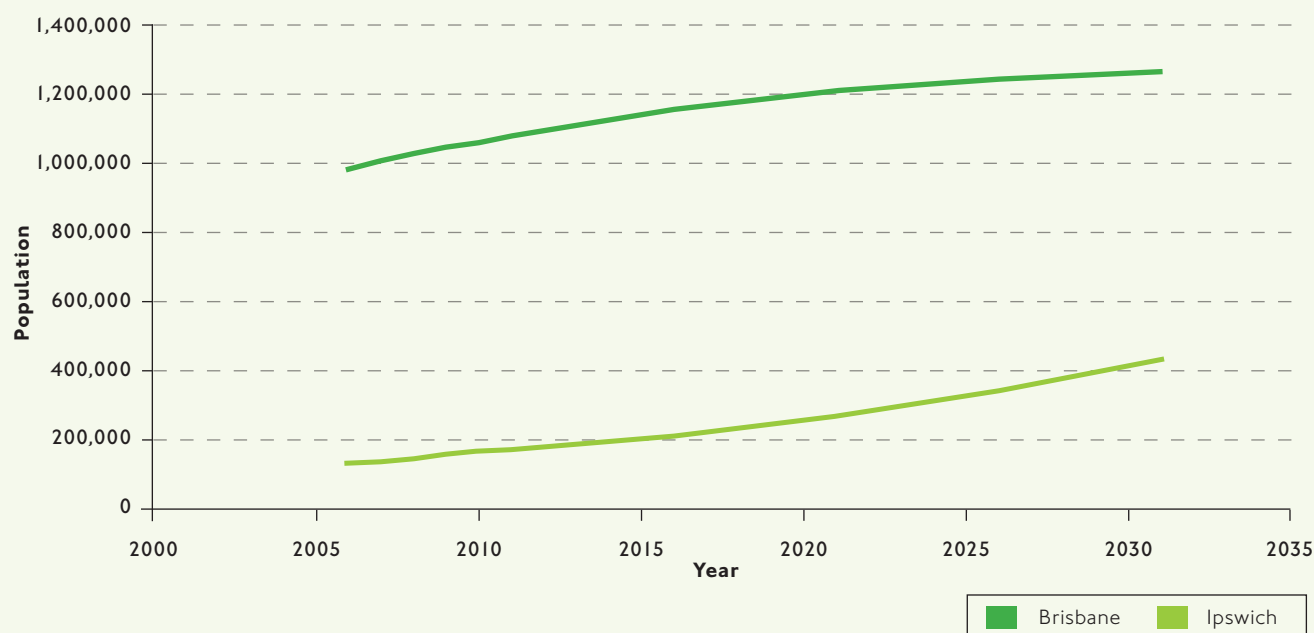


Figure 2 – Brisbane and Ipswich resident population projections

3.3 Supporting population growth

South East Queensland is Australia's fastest growing metropolitan region, as reflected by the combined projected population growth for the five local government areas making up our service area.

Whereas most population growth within the Brisbane area will be serviced largely by infill development, the urban development footprints in the other four local government areas are expected to expand significantly as the population increases.

Figures 2 and 3 show the resident population projections for Brisbane and Ipswich, and the localities of Lockyer Valley, Scenic Rim and Somerset respectively. A summary table presenting the resident population projections is included in Appendix E. Key growth projections for our entire service area are mapped in Figure 4.

We face a significant challenge in planning for, providing and maintaining the infrastructure to service future growth. It will be necessary to plan for new infrastructure and make sure that existing systems are used effectively.

Land use planning is primarily a local government function. However, there are some areas within our service area which are controlled by other entities. These include the Urban Land Development Authority, Port of Brisbane Corporation, Brisbane Airport Corporation and Royal Australian Air Force

Base at Amberley. Local governments develop population and employment projections for their local government area based on information contained in planning schemes, census data, projections by Demography and Planning (DAP) in the Office of Economic and Statistical Research, development activity, Regional Plan targets and economic analysis.

We determine our growth projections from local government population and employment projections. The current population projections received from participating councils for infrastructure planning purposes are summarised in Table 1. Population projections are continuously evolving, with changes occurring regularly as planning is undertaken and reviewed. Queensland Urban Utilities and participating councils collaborate to ensure the population sources used for infrastructure planning are current and appropriate for use.

There are a number of factors that can influence the growth rate and location of new development throughout the region. The January 2011 flood in South East Queensland, for instance, would have impacted on the mindset of the community in terms of safeguarding against natural disasters. The question of whether such an event will have a short- or long-term effect on population growth, and therefore planning of new infrastructure, will require further consideration.

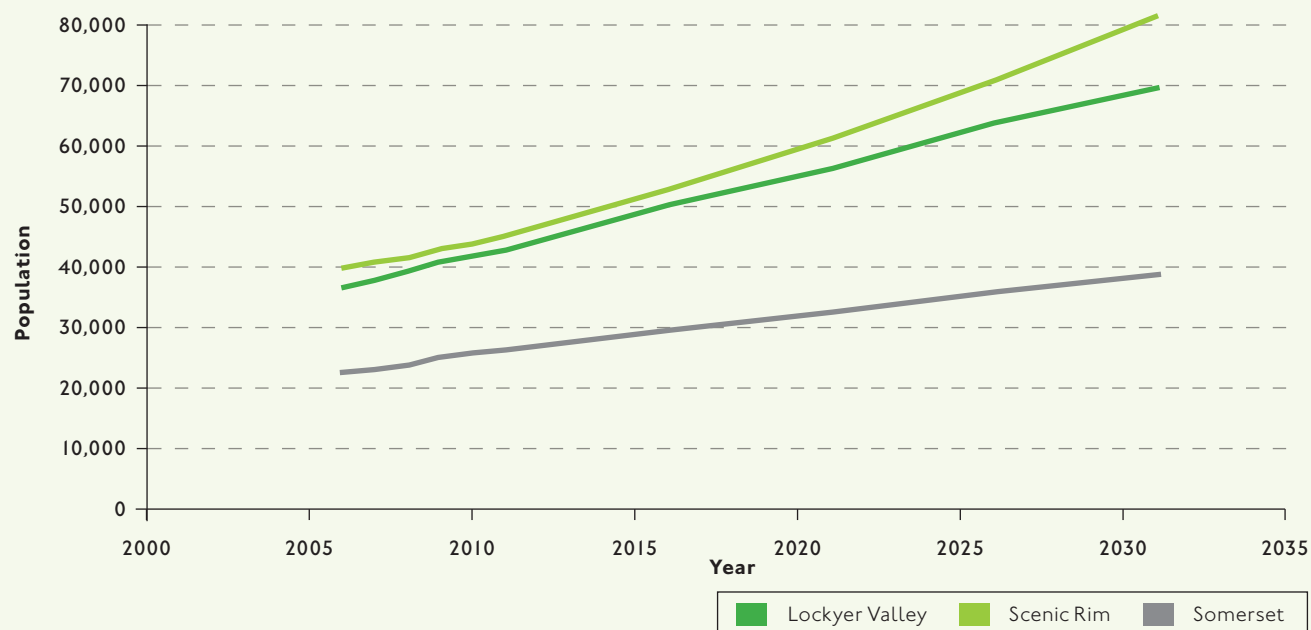


Figure 3 – Lockyer Valley, Scenic Rim and Somerset resident population projections

The following subsections outline the resident population projections for our service area and are based on the South East Queensland Regional Plan and DAP projections.

Brisbane

The majority of growth in Brisbane is expected to occur as infill in urban renewal areas and transit oriented developments.

Major areas of growth over the next 10 to 15 years will be in the Urban Development Areas at Northshore Hamilton, Bowen Hills and Fitzgibbon, and other areas identified for high-density development such as West End/South Brisbane, Woolloongabba, Milton, Toowong/Auchenflower and Fortitude Valley. These will cater for a mix of residential and commercial uses. Major low-density residential greenfield development will occur at Rochedale and Willawong/Pallara. The major industrial/commercial growth will occur in the Australia TradeCoast area, around Brisbane Airport and in the Wacol area.

Ipswich

Ipswich will see substantial growth and development in Springfield and Ripley Valley. Greater Springfield is a master-planned development of more than 2860 hectares. It has been proceeding since 1991 and is expected to support further substantial growth for the next 10 to 15 years.

The Queensland Government has announced that the Urban Land Development Authority will be responsible for the major greenfield site of Ripley Valley which has been declared an Urban Development Area.

The Urban Land Development Authority has taken full responsibility for planning and development assessment within the Urban Development Area and we will provide input to this planning process as requested.

Lockyer Valley, Scenic Rim and Somerset

The expected resident population growth for these three localities are:

- Lockyer Valley – from 36,600 in 2010 to 61,000 in 2031
- Scenic Rim – from 38,300 in 2010 to 71,000 in 2031
- Somerset – from 22,500 in 2010 to 34,000 in 2031.

Figure 4 – Key growth areas

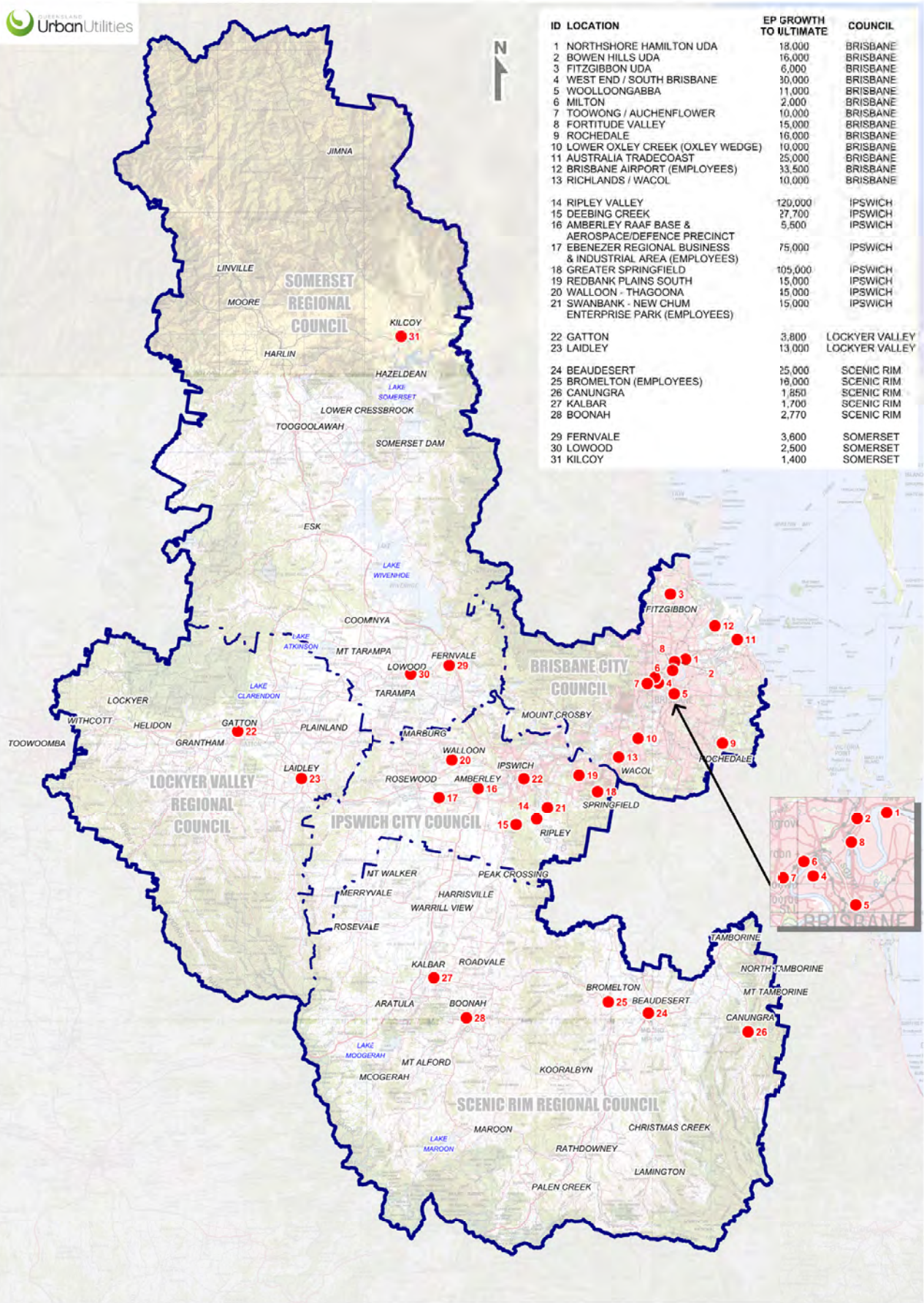


Table 1 – Population sources provided by participating councils

District	Population source
Brisbane City Council	Brisbane Urban Growth Model as provided by Brisbane City Council (May 2009).
Ipswich City Council	Ipswich City Council Population Model as provided by Ipswich City Council (August 2009).
Lockyer Valley Regional Council	Lockyer Valley Regional Council Residential Needs Report (Town Planning Strategies) as provided by Lockyer Valley Regional Council (September 2010).
Scenic Rim Regional Council	<ul style="list-style-type: none"> i. Scenic Rim Regional Council Beaudesert Planning Scheme Area South Priority Infrastructure Plan as provided by Scenic Rim Regional Council (January 2011). ii. Scenic Rim Regional Council Boonah Area Priority Infrastructure Plan as provided by Scenic Rim Regional Council (2009).
Somerset Regional Council	<ul style="list-style-type: none"> i. Somerset Regional Council Somerset Regional Planning Project – Land Study Report as provided by Somerset Regional Council (December 2010). ii. Somerset Regional Council Economic Working Paper as provided by Somerset Regional Council (October 2010).

3.4 Supporting sustainability

We place great emphasis on sustainable planning over the long term. The effects of the Millennium Drought and January 2011 South East Queensland flood have further highlighted the importance of long-term planning in ensuring a sustainable future for both our customers and our business. Our current focus includes climate change, ecological sustainability and water demand management.

Climate change and energy management

There is broad scientific consensus that climate change induced by global warming poses one of the greatest challenges to humanity this century, and that greenhouse gases produced by human activity are a major contributor to the process.

To successfully meet the challenge, Queensland Urban Utilities is developing a Climate Change Strategy which will focus on:

- adaptation – managing the effects of climate change on our infrastructure and operations
- mitigation – reducing energy consumption and greenhouse gas emissions, putting Queensland Urban Utilities on a cost-effective path towards carbon neutrality.

Adaptation will consider measures to reduce the impacts of increasing intensity and occurrence of flood, drought, bushfires, cyclones and severe weather events, and rising sea levels.

Mitigation will consider actions to reduce greenhouse gas emissions and will include:

- avoiding energy use and implementing energy efficiency measures
- energy recovery and renewable energy generation using biogas and biomass
- purchasing GreenPower and offsetting emissions with carbon credits.

We place great emphasis on sustainable planning over the long term.



The picturesque Scenic Rim. Image courtesy of Scenic Rim Regional Council.

Ecological sustainability

The concept of ecological sustainability was introduced in the early 1970s, and has undergone further refinement over the last four decades. It has now evolved beyond just the 'natural environment' to include the social, economic, cultural and political environments. Ecological sustainability is not a static concept, and will undergo further change as the relationships between the economic, social, political and ecological spheres of our environment continue to evolve. It provides the over-arching strategic and conceptual framework under which specific challenges, such as the management of population growth and climate change, can be addressed in a holistic manner.

Our commitment to ecological sustainability

The *Sustainable Planning Act 2009* is one of several acts and regulations that will guide our planning, design and construction, and operational activities. We will consider that we have been successful if we can contribute towards:

- the conservation, enhancement or restoration of life-supporting capacities of ecosystems
- the protection of biological diversity
- the creation of diverse, efficient, resilient and strong economies which espouse the principles of inter-generational equity
- the creation of well-serviced and healthy communities with affordable, efficient, safe and sustainable development
- the conservation or enhancement of areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance

- the provision of integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational or social interaction
- a focus on potential adverse impacts on climate change from development, and addressing them through sustainable development.

We recognise that not all of our activities have potential to impact on the outcomes described above, but we will seek to contribute where we can. We also recognise that it is often necessary to seek a balance which provides the best overall position between competing objectives.

Sustainable best practice

Queensland Urban Utilities strives to perform beyond what is required by legislation to achieve industry 'best practice' in all our activities. A number of initiatives have been implemented, and more are under consideration.

A key policy initiative is our move to further embrace the guiding principles of ecological sustainability by adopting and managing five business sustainability types.

1. **Natural sustainability** – includes natural resources and ecological systems.
2. **Social sustainability** – is the critical component of our relationship with the community, which grants us our social licence to operate.
3. **Human sustainability** – relates to the health, knowledge, skills, motivation and productivity of our staff.



We are committed to excellence in environmental management

4. **Manufactured sustainability** – refers to all material goods and the infrastructure necessary to assure our service provisions.
5. **Financial sustainability** – reflects the productive power and monetary value of the other four types of sustainability.

We are developing our policies and strategic framework in accordance with the Global Reporting Initiative. The Global Reporting Initiative framework sets out the principles and indicators that organisations can use to measure and report their economic, environmental and social performance.

Future initiatives we are considering include:

- research and investment in emerging technologies
- stormwater harvesting
- the preparation of an alternate water strategy as an integral component of total water cycle management planning
- the implementation of strategic business sustainability programs
- source control (catchment management) initiatives
- trade waste management initiatives
- improvements in the handling of hazardous chemicals and waste
- the application of sustainable principles to material specification and the procurement process

- the application of the principles of sustainability to vehicle fleet selection
- a corporate commitment to a process of continuous review and improvement
- creating awareness of sustainability initiatives throughout our business.

Water demand management

Our water demand management strategy incorporates several complementary initiatives to manage residential, commercial and industrial water consumption, including:

- accurately measuring and monitoring water use
- commercial/industrial water efficiency management plan program
- minimising system losses through an active pressure and leakage management program
- educating our customers to ensure they are well informed of their consumption patterns
- establishing and maintaining industry partnerships.

Water consumption trends

Understanding how water is used assists us in developing strategies to manage water demand. A recent study entitled *South East Queensland Residential End Use Study: Baseline Results – Winter 2010*¹ presents a breakdown of a typical residential average daily usage of 145.3L/person/day. This breakdown is shown in Figure 5 overleaf.

¹ Cara Beal, Rodney Stewart, Tsu-Te (Andrew) Huang (November 2010). Urban Water Security Research Alliance Technical Report No. 31.

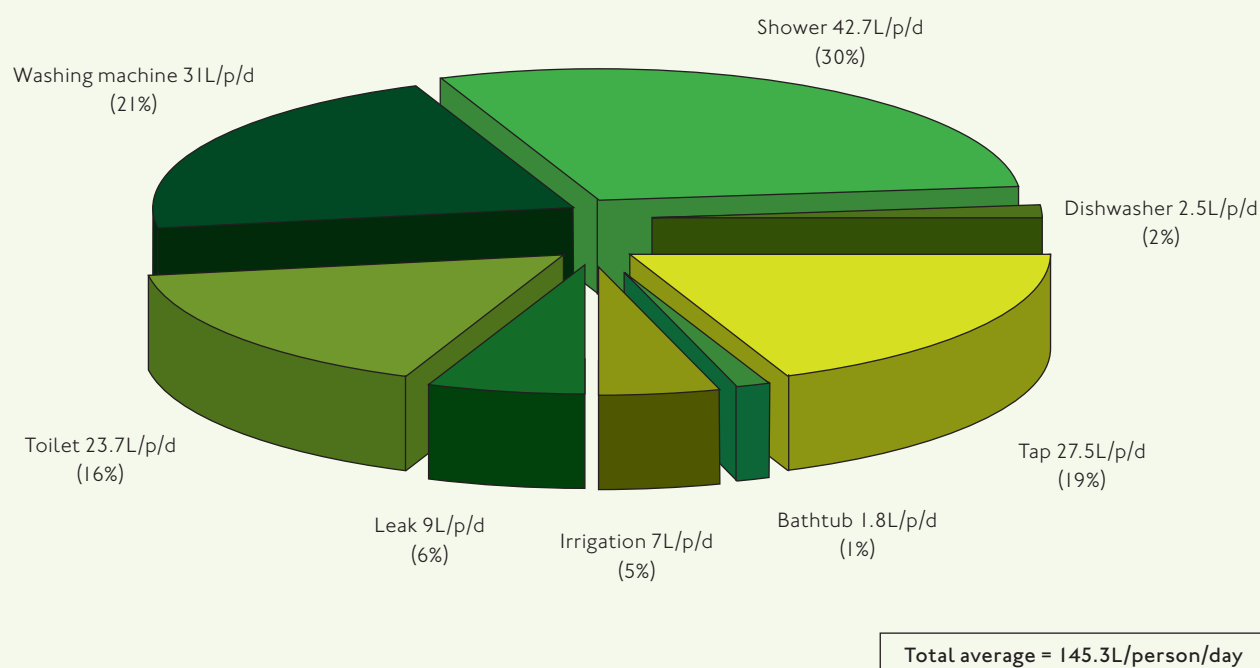


Figure 5 – Average daily per capita water end-use

Achievements

Since 2004/05 the council water businesses, Queensland Urban Utilities, the Queensland Government and the community have contributed to increased water use efficiencies in both the residential and industrial/commercial sectors. Figure 6 shows the decreasing residential water use per person throughout our service area since 2005.

Targets

The Queensland Water Commission Permanent Water Conservation Measures, supported by the Queensland Government, has set a voluntary water use target of less than 200 litres per person per day (*Target 200*) for the residents of South East Queensland. We support this measure and aim to contribute to maintaining consumption below this level.

Demand forecasts

Over the next 20 years, the water demand throughout our service areas is predicted to steadily rise due to:

- an anticipated rise in residential per capita water consumption
- significant anticipated population growth in South East Queensland.

Figure 7 overleaf shows the average daily forecast water demand for each of the five council areas. A summary table presenting the forecast demand by region is included in Appendix E.

Regional water supply strategy

The South East Queensland Water Strategy identifies a number of demand management initiatives to be undertaken by various agencies. The key activities that require a coordinated approach between the Queensland Water Commission, distributor-retailers and other key stakeholders include²:

- Strategy No. 16 – Review permanent water conservation measures in 2010–2011
- Strategy No. 25 – Review system leakage targets over the long term.

The demand on high-quality drinking water can be mitigated by using water of a more appropriate quality for non-drinking applications. Where it is appropriate and cost effective, we will consult closely with councils to consider:

- extending the availability of Class A recycled water
- supporting the use of communal rainwater collection and use systems
- trialling stormwater harvesting and reuse schemes.

We will continue to support the use of purified recycled water in accordance with government policy by providing treated effluent to the Western Corridor Recycled Water Supply Scheme when required.

² Extract from SEQ Water Strategy – Table 8.4 Recommended planning activities and initiatives.

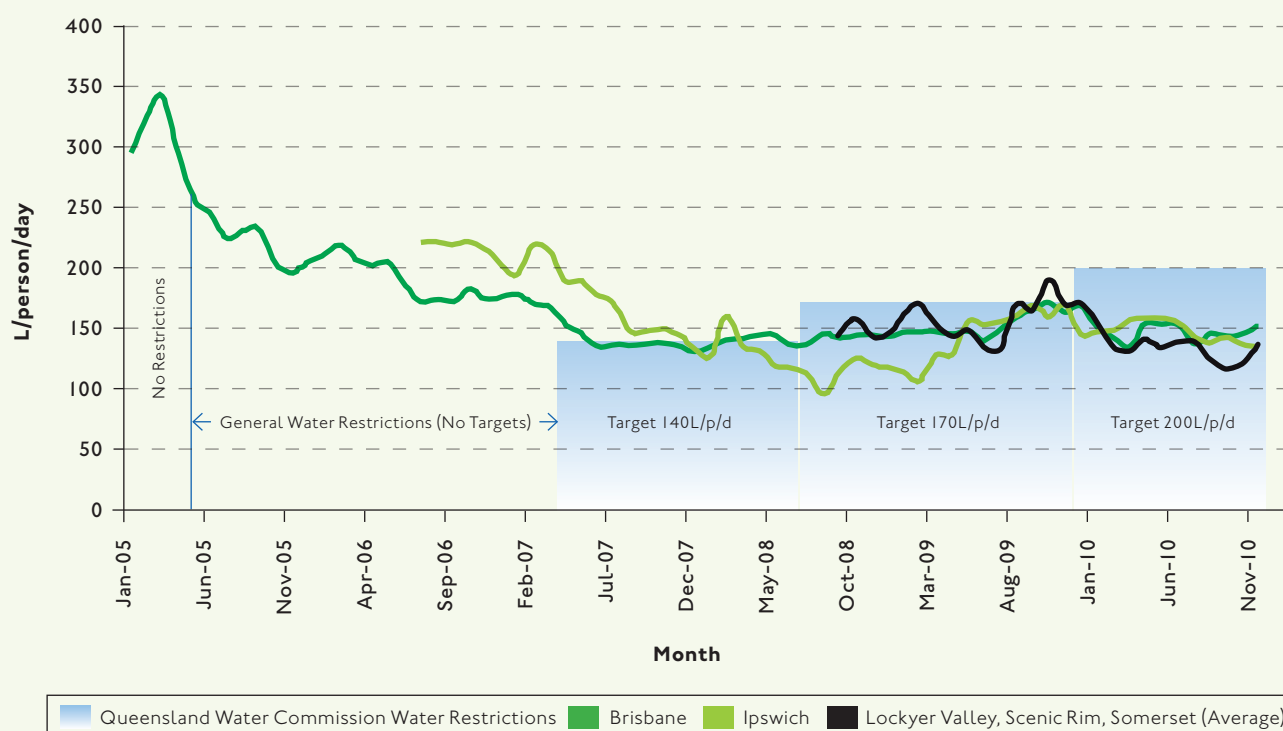


Figure 6 – Queensland Urban Utilities average residential water use per person

Our strategy

Community education

Education campaigns are an essential part of managing water demand. Queensland Urban Utilities will engage with the community by:

- continuing to provide fact sheets and useful website links to residents, community groups, business and industry on how to reduce water consumption
- participating in local council and other community events to provide practical advice, information and tools on becoming waterwise, and minimising our carbon footprint.

Utility water conservation

We have adopted various initiatives to reduce water use during network operations, including:

- improving our water mains cleaning (mains scouring) activities
- using tankers to capture hydrant testing/mains scouring water for reuse at parks and gardens
- water efficient retrofitting of all Queensland Urban Utilities' buildings and facilities.

Commercial water conservation

Queensland Urban Utilities continues to promote water efficiency through our Water Efficiency Management Plan (WEMP), which currently involves over 1300 participants.

We will:

- continue to work with businesses to develop, implement and report on their water efficiency management plans and water saving projects
- encourage businesses and industry to use alternative water sources to meet their water demand requirements, where appropriate and cost effective
- continue to partner with industry groups, research organisations and government departments to improve and develop our knowledge and information in water management.

Leakage management

We have, and are continuing to implement, a program to reduce water system losses by:

- introducing pressure management in areas with high or variable water pressure
- ensuring our water mains and services are inspected for leaks at a rate appropriate for the condition of the pipes
- responding rapidly to breaks in mains and detected leakage in our networks
- ensuring metering accuracy.

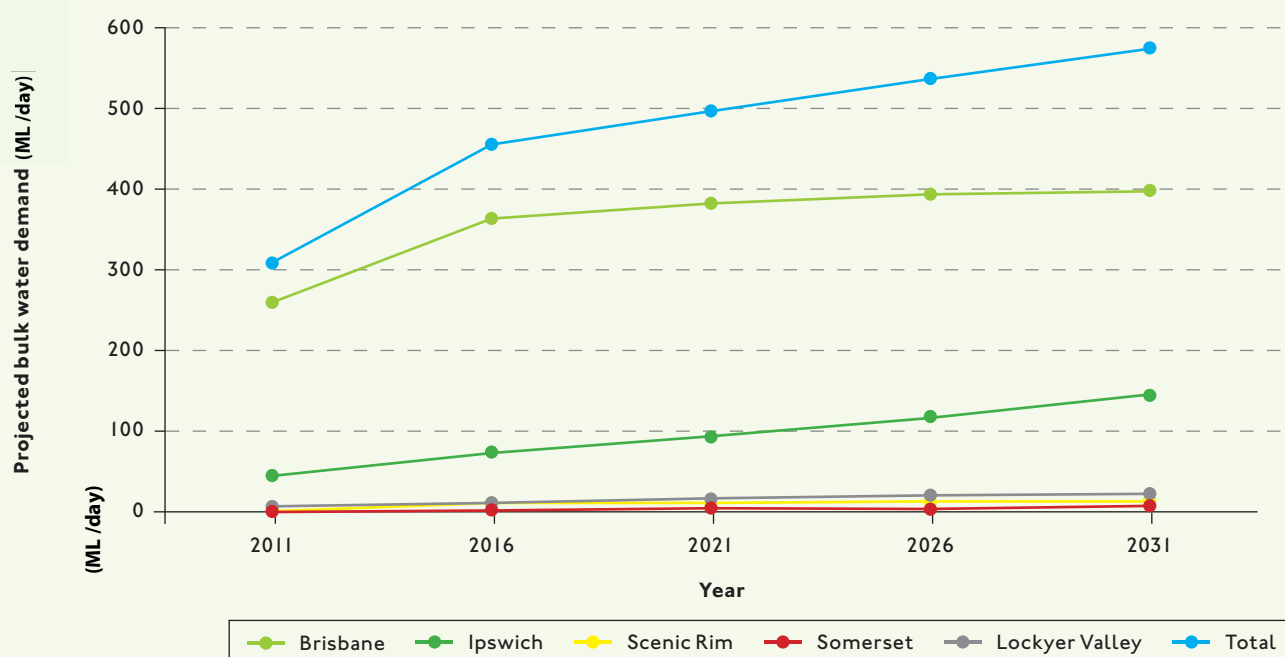


Figure 7 – Water demand forecast for Queensland Urban Utilities' service area

Monitoring

Key performance indicators

We use a number of operational key performance indicators to monitor the effectiveness of our demand and leakage management activities. The main key performance indicators are:

- residential per person consumption (L/person/day)
- non-residential consumption (L/property/day)
- non-revenue water (L/connection/day)
- leakage (L/connection/day).

Metering strategy

We are committed to a range of metering and monitoring programs to assist in managing demand for water. Our aim is to ensure our metering is accurate, completed on a regular basis, and the information provided to our customers in a timely manner. We will support:

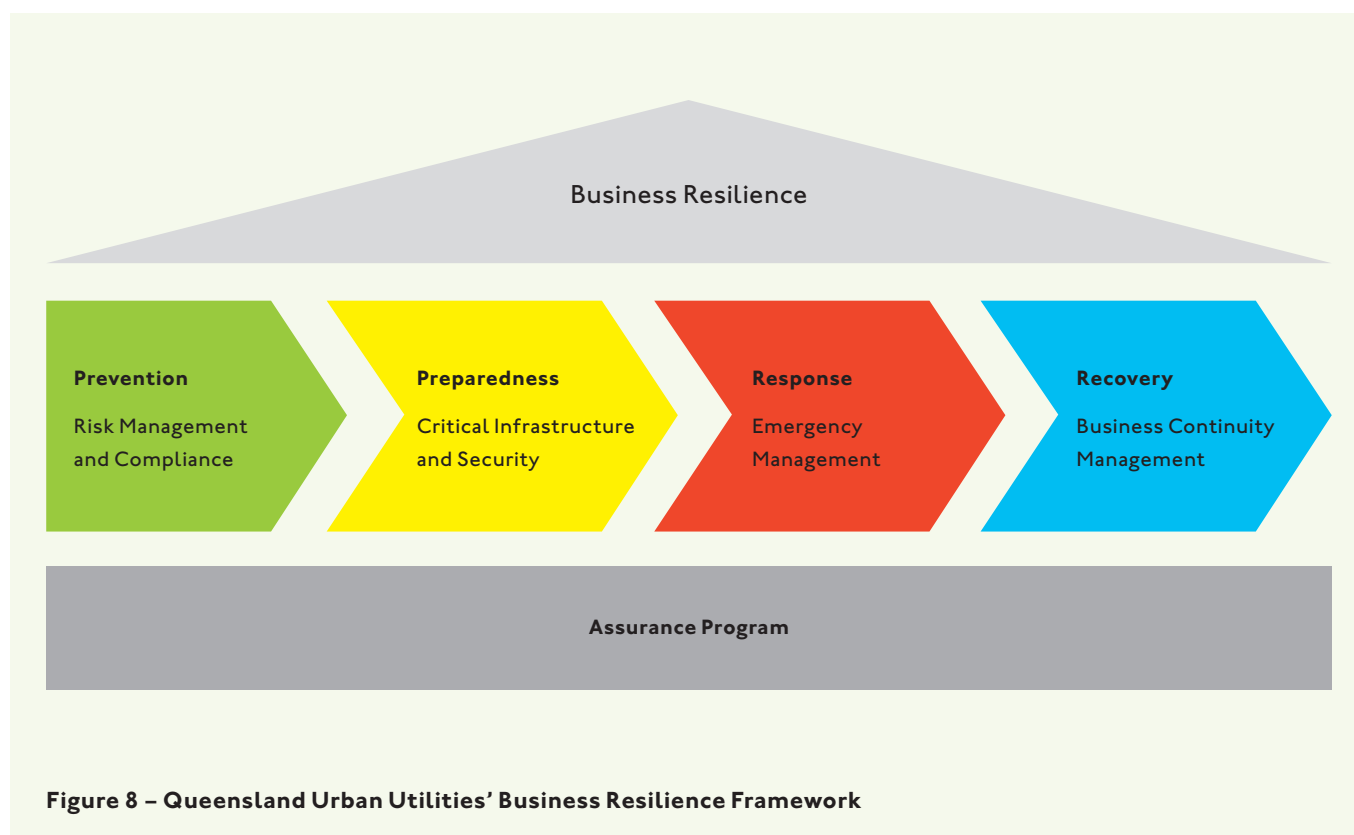
- the Queensland Government's policy for compulsory metering and sub-metering to reticulated commercial and residential properties
- the region's *Target 200* campaign for residential consumption, providing appropriate information on our water bills
- the Queensland Water Commission's residential excessive water user compliance program that alerts households using more than 1200 litres per day.

3.5 Minimising environmental impacts

Queensland Urban Utilities provides a service to collect, transfer and treat wastewater in a manner that reduces pollution to the environment and minimises public health risks. At times, sewage overflows can occur, usually during significant rainfall events as a result of excessive stormwater entering the wastewater system. Other potential causes for overflows can include pipe blockages, mechanical failure and power outages.

The impact of overflows on the environment and the community will vary depending on a variety of factors, including the location of the spill, volume of the overflow, weather conditions at the time, and exposure to the public.

Our approach to minimising and managing sewage overflows focuses on planning standards development, and operational activities. Efforts to reduce the number of overflows include increasing the delivery capacity of the system through improved design, condition assessment and new infrastructure, as well as improving the way we operate. Minimising the impact of overflows generally relies on an immediate response by our field crews, localised mitigation strategies, and feedback from the community.



3.6 Emergency response management

The January 2011 South East Queensland flood has highlighted the importance of responding to emergencies in a way that minimises impacts to the community. Queensland Urban Utilities has an Emergency Response Plan that provides a framework to manage any incident which impacts our customers and operations.

The Emergency Response Plan is an emergency management plan that forms part of our wider Business Resilience Framework (see Figure 8).

In an emergency situation our key objectives are to:

- maintain the safety of employees and the public
- protect the continuity of water and wastewater services to customers
- protect the quality of the water supply to customers
- protect landowner and community property
- protect the environment
- protect continuity of other services supplied to customers
- protect assets and infrastructure
- maintain Queensland Urban Utilities' reputation.

3.7 Flood resilience

Natural disasters present a number of challenges to the business, from our immediate response to emergencies, through to a long-term view of protecting our assets to provide a safe, secure and reliable service. The 2011 South East Queensland flood had a significant impact on our operations. This presented us with an opportunity to review the risks and consequences of such events in order to improve our mitigation strategies.

In reviewing our strategies we will focus on three key principles.

- **Avoidance:** moving critical infrastructure to areas that have a lower flood risk.
- **Resistance:** preventing flood water from impacting on the infrastructure.
- **Resilience:** minimising the damage caused by flood water.

Our approach will consider localised areas and the system as a whole to address our primary concerns around customers without service, general public health and safety, and environmental pollution.



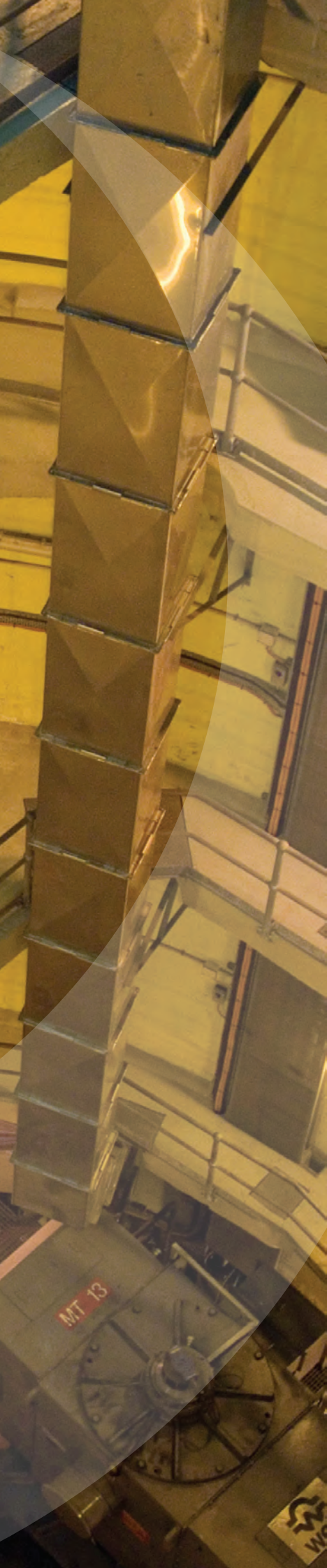
Eagle Farm Pump Station, Brisbane.

MT 12

4. OUR INFRASTRUCTURE NETWORK

Queensland Urban Utilities' water and wastewater infrastructure networks service the cities and townships of Brisbane, Ipswich, Lockyer Valley, Scenic Rim and Somerset.

Our water and wastewater assets as of 1 July 2010 are summarised in Table 2 overleaf and are shown in figures A1 to A16 in Appendix A.



Our assets include 121 water reservoirs and 8819km of water supply network.

4.1 Water supply network

Our water supply network extends from our connection points with the SEQ Water Grid to the connections at our customers' property boundaries. It includes storage reservoirs, pipes, pumps and water meters. Figure A1 in Appendix A shows our water supply network and the key infrastructure of the SEQ Water Grid.

Our water supply network is predominantly concentrated in the centre of our operating region, extending west from Brisbane through to Ipswich and the Lockyer Valley. Brisbane and Ipswich make up about 89% of the total water supply network, with Lockyer Valley, Scenic Rim and Somerset making up the remaining 11%.

Brisbane

In Brisbane, drinking water from the SEQ Water Grid is distributed to water reservoirs via trunk mains operated by LinkWater and Queensland Urban Utilities. There are 37 reservoirs that supply drinking water throughout the 188 suburbs of Brisbane via approximately 300km of trunk mains and 6000km of reticulation mains. Wellers Hill and Green Hill are two of the largest water supply zones in Brisbane. Part of Brisbane's trunk network also transports water to the Allconnex distribution and retail area.

Thirty 'Pressure Managed Area' zones have been introduced around Brisbane to regulate the pressure of low-level areas in Brisbane in order to reduce consumption and water loss within the system.

The capacity of Brisbane's existing water network is sufficient for the current demands on the system (see Chapter 5). Figure A3 in Appendix A shows the Brisbane water supply network.

Table 2 – Summary of Queensland Urban Utilities' existing assets

Infrastructure assets	Brisbane City	Ipswich City	Lockyer Valley Region	Scenic Rim Region	Somerset Region	Total
Water reservoirs	37	27	16	29	12	121
Water pump stations	14	18	9	7	3	51
Water boosters	81	13	9	2	0	105
Water supply network (km)	6222	1646	426	300	225	8819
Wastewater network (km)	7107	1505	146	150	112	9020
Wastewater pump stations	204	61	25	20	24	334
Wastewater treatment plants	9	4	4	6	5	28



Gatton Wastewater Treatment Plant.

Ipswich

In Ipswich, drinking water from the SEQ Water Grid is distributed to 27 water reservoirs and supplied to customers via 1646km of water mains. Figure A7 in Appendix A shows the Ipswich water supply network.

Lockyer Valley

In Lockyer Valley, drinking water from the SEQ Water Grid is distributed to the eight towns, as shown in Table 3. Water is treated at a water treatment plant (WTP) located in Lowood, and supplied to the former Gatton Shire at the eastern boundary of the shire, and then to Withcott. Water bypassing Gatton is pumped to either the Helidon Reservoir or Postmans Ridge Reservoir. Helidon Reservoir distributes water to the towns of Helidon and Grantham. Postmans Ridge Reservoir delivers water to a few properties in Postmans Ridge. Figure A11 in Appendix A shows the Lockyer Valley water supply network.

Scenic Rim

In Scenic Rim, drinking water from the SEQ Water Grid is distributed to 11 townships, as shown in Table 3. The water supply network provides two types of service – ‘on demand’ and ‘constant flow’. On demand is the supply of treated water at full pressure to residential, commercial and industrial properties. Constant flow is the supply of treated water at a controlled rate of eight litres per minute to rural and residential properties. Figure A13 in Appendix A shows the Scenic Rim water supply network.

Somerset

In Somerset, drinking water from the SEQ Water Grid is distributed to nine towns, as shown in Table 3. The water supply networks are independent, with the distances between the townships providing minimal integration opportunities. Figure A15 in Appendix A shows the Somerset water supply network.

Table 3 – Cities and townships serviced by Queensland Urban Utilities

Area	Water supply network	Wastewater network
Brisbane	Brisbane	Brisbane
Ipswich	Ipswich urban area and rural townships including Marburg, Rosewood and Walloon	Ipswich urban area and Rosewood
Lockyer Valley	Forest Hill, Gatton, Grantham, Helidon, Kensington Grove, Laidley, Regency Downs and Withcott	Forest Hill, Gatton, Helidon and Laidley
Scenic Rim	Aratula, Beaudesert, Boonah, Canungra, Harrisville, Kalbar, Kooralbyn, Mt Alford, Peak Crossing, Rathdowney and Warrill View	Aratula, Beaudesert, Boonah, Canungra, Kalbar and Kooralbyn
Somerset	Esk, Fernvale, Jimna, Kilcoy, Linville, Lowood, Minden, Somerset Dam and Toogoolawah	Esk, Fernvale, Kilcoy, Lowood and Toogoolawah



One of our larger customers – RAAF Base at Amberley.

4.2 Wastewater networks and wastewater treatment plants

The wastewater network consists of an array of gravity-fed pipes, pump stations and pressure mains transporting wastewater from customers to wastewater treatment plants (WWTPs), where the wastewater is treated prior to disposal or re-use. There is currently minimal system interaction between the networks within the five council areas. Around 80% of our wastewater network services Brisbane, 16% Ipswich and the remainder Lockyer Valley, Scenic Rim and Somerset. Figure A2 in Appendix A shows our wastewater network.

Brisbane

Brisbane's wastewater network comprises nine WWTPs servicing seven catchments. The network contains approximately 7000km of sewer mains, with approximately 200km of these being pressure mains.

Luggage Point, Oxley and Gibson Island are the three major WWTPs in Brisbane, with Luggage Point servicing approximately 60% of Brisbane's total wastewater.

Table 4 shows the catchment areas and the plants that service them, as well as the population serviced by the plant and the year of commissioning. Figure A4 in Appendix A shows the Brisbane wastewater network.

Brisbane's largest pumping station at Eagle Farm pumps wastewater from the S1 catchment to Luggage Point WWTP via 11km of pressure mains. Wastewater is transported to the Eagle Farm pump station through three main sewer lines: the Main Sewer through Brisbane City, and the North Kedron Brook and Norman Creek sewers. Other major wastewater infrastructure in the Brisbane area includes the 2.4m diameter S1 interceptor from North Quay to Hamilton, and the Bulimba Creek trunk sewer, which transports wastewater from the S3 catchment to the Gibson Island WWTP.

Ipswich

The wastewater network in Ipswich services the three major catchments of Bundamba, Goodna and Carole Park, and the minor catchment of Rosewood. These catchments have four WWTPs: Bundamba, Goodna, Rosewood and Carole Park. Amberley is serviced by a WWTP owned and operated by the RAAF. Areas that are not serviced by the wastewater network have on-site septic systems.

Table 5 shows the catchment areas and the plants that service them, as well as the population serviced by the plant and the year of commissioning. Figure A8 in Appendix A shows the Ipswich wastewater network.



Around 80% of our wastewater network services Brisbane, 16% Ipswich and the remainder Lockyer Valley, Scenic Rim and Somerset.

Table 4 – Brisbane wastewater treatment plants

Catchment	WWTP	Current capacity (population)	Year first commissioned
S1	Luggage Point	850,000	1978
S2	Fairfield	12,500	1966
	Oxley	270,000	1968
	Rocks Riverside	360kL (irrigation)	2002
S3	Gibson Island	180,000	1990
S4	Wynnum	37,500	1965
S5	Sandgate	104,000	1968
S6	Wacol	35,000	1991
S7	Karana Downs	2500	1982

Table 5 – Ipswich wastewater treatment plants

Catchment	WWTP	Current capacity (population)	Year first commissioned
Bundamba and Tivoli	Bundamba	100,000	1982
Goodna	Goodna	55,000	1971
Carole Park	Carole Park	22,000	1973
Rosewood	Rosewood	3000	1960

Lockyer Valley

In Lockyer Valley, the towns of Gatton, Helidon, Laidley and Forest Hill are sewered. Wastewater is collected and directed to four separate WWTPs. There are 25 pump stations in total and 146km of wastewater network.

Table 6 shows the catchment areas and the plants that service them, as well as the population serviced by the plant and the year of commissioning. Figure A12 in Appendix A shows the Lockyer Valley wastewater network.

Table 6 – Lockyer Valley wastewater treatment plants

Catchment	WWTP	Current capacity (population)	Year first commissioned
Gatton	Gatton	6800	1959
Helidon	Helidon	700	1998
Laidley	Laidley	6800	1968
Forest Hill	Forest Hill	700	1966

We will work with the Queensland Water Commission to investigate further recycled water initiatives.



Scenic Rim

Scenic Rim has six wastewater schemes servicing Aratula, Beaudesert, Boonah, Canungra, Kalbar and Kooralbyn, each serviced by a WWTP. Beaudesert, Boonah, Canungra and Kooralbyn have 20 pump stations in total. There are other smaller urban areas that are not connected to the wastewater network and treatment scheme. Properties in these areas have traditional on-site septic systems and aerated wastewater treatment systems.

Table 7 shows the catchment areas and the plants that service them, as well as the population serviced by the plant and the year of commissioning. Figure A14 in Appendix A shows the Scenic Rim wastewater network.

Table 7 – Scenic Rim wastewater treatment plants

Catchment	WWTP	Current capacity (population)	Year first commissioned
Aratula	Aratula	250	1988
Boonah	Boonah	3000	1967
Kalbar	Kalbar	1000	1971
Beaudesert	Beaudesert	8000	1965
Canungra	Canungra	850	1976
Kooralbyn	Kooralbyn	2000	1979

Somerset

In Somerset, wastewater services are provided to the communities in Esk, Lowood, Toogoolawah, Fernvale and Kilcoy. At Fernvale, only a small percentage of the town’s population is connected to the current scheme. Other settlements within Somerset are serviced by on-site septic systems.

Table 8 shows the catchment areas and the plants that service them, as well as the population serviced by the plant and the year of commissioning. Figure A16 in Appendix A shows the Somerset wastewater network.

Table 8 – Somerset wastewater treatment plants

Catchment	WWTP	Current capacity (population)	Year first commissioned
Esk	Esk	1300	1977
Toogoolawah	Toogoolawah	1300	1972
Lowood	Lowood	1200	1974
Fernvale	Fernvale	400	1992
Kilcoy	Kilcoy	2100	1980



Mount Tamborine. Image courtesy of Scenic Rim Regional Council.

4.3 Recycled water

Brisbane

Brisbane has approximately 13.5km of recycled water mains and five recycled water tanker filling stations supplying recycled water to approved water carriers for non-potable use. The five tanker filling facilities are located at the Luggage Point, Sandgate, Oxley, Wacol and Gibson Island WWTPs.

High-quality recycled water is supplied to the BP Refinery at Bulwer Island from a purpose-built advanced WTP at Luggage Point. Similarly, high-quality recycled water is supplied to the Caltex Refinery at Lytton from a purpose-built facility at the Wynnum WWTP. Both advanced water treatment plants are based around reverse osmosis membrane technology.

There are a number of golf courses and parks around Brisbane that are supplied with recycled water.

Ipswich

Ipswich contributes the majority of its treated water flow from the Bundamba and Goodna WWTPs to the Western Corridor Recycled Water Scheme.

Treated effluent from Carole Park WWTP is supplied to Gailes, Wolston Park and Brookwater Golf Courses. Treated effluent from Rosewood WWTP is supplied to Rosewood Golf Course.

Recycled water is also supplied from tanker filling stations to approved water carriers for non-residential use. These tanker filling stations are located at the Bundamba and Carole Park WWTPs.

Lockyer Valley

Recycled water is available from the Gatton WWTP.

Scenic Rim

Recycled water is supplied from the Beaudesert WWTP to the Beaudesert race course, golf course, and a dairy farmer. Recycled water is also supplied from the Boonah WWTP to a farmer and the golf course, and from the Kalbar WWTP to local users.

Somerset

The Esk WWTP supplies recycled water to Esk Golf Course. The Toogoolawah WWTP supplies recycled water to Toogoolawah Golf Course. Effluent reuse also occurs on an ad hoc basis to provide water to council parks and gardens.

Western Corridor Recycled Water Scheme

The Queensland Government's Western Corridor Recycled Water Scheme is the largest recycled water scheme to be constructed in Australia, and the third largest advanced water treatment project in the world. It has the capacity to provide up to 232ML of purified recycled water a day to the region's supply.

We provide treated wastewater to the project from our WWTPs at Bundamba, Gibson Island, Luggage Point, Wacol, Oxley Creek and Goodna.

Future developments

We will work with the Queensland Water Commission, industry groups and participating councils to investigate further recycled water initiatives and total water cycle management practices. Queensland Urban Utilities supports the Lockyer Valley food bowl in terms of investigating recycled water supply options.



Supporting growth and development
through the delivery of new infrastructure.



5. INCREASING THE CAPACITY OF OUR INFRASTRUCTURE

This chapter outlines the key infrastructure projects that we will undertake to support growth and maintain appropriate levels of service from existing water and wastewater assets. Some of the required infrastructure may be provided by developers.

Queensland Urban Utilities will work together with our participating councils to ensure that growth projections published in the Water Netserv Plan will be the most current at the time.

All major proposed water and wastewater network and treatment plant projects relating to new infrastructure or the renewal of existing infrastructure are identified in this chapter. Appendix B summarises all proposed water and wastewater investment projects as of 1 July 2011.

5.1 Our planning process

We seek to effectively service the growth anticipated by the South East Queensland Regional Plan and local government planning by:

- constructing water and wastewater infrastructure for new areas
- increasing the capacity of existing networks to maintain service standards in established areas undergoing further growth. This can be achieved through:
 - upgrading and replacing existing assets
 - constructing links between existing assets
 - creating new infrastructure
 - optimising system performance by means other than building new infrastructure.

Our planning process is generally approached on four levels:

- strategic planning
- master planning
- local government priority infrastructure planning
- pre-feasibility and detailed feasibility planning.

Strategic planning

Strategic planning develops the overall high-level strategy applying to our entire service area. It adopts a holistic approach to the planning and delivery of integrated water and wastewater services. At this level, we assess opportunities for improvements in system configuration.

Master planning

Master planning involves strategy development and investigation of individual supply area schemes in accordance with the broader strategic plan. This level of the process identifies the costs and timing of proposed infrastructure required to maintain customer standards of service for projected growth.

Local government priority infrastructure plans

Under the *Sustainable Planning Act 2009* (SPA), councils are required to prepare Priority Infrastructure Plans (PIPs). A PIP is an infrastructure plan that aligns with land use planning and supports the quality of life in the community. PIPs help plan infrastructure in an efficient and logical manner, encouraging growth in areas where adequate infrastructure exists or can be provided efficiently.

Trunk infrastructure contained in a PIP includes:

- water supply network (e.g. pumps, reservoirs, distribution mains)
- wastewater network (e.g. pumps, rising mains, treatment plants)
- stormwater network (e.g. drainage)
- transport network (e.g. roads, bike paths)
- community purposes (e.g. public parks).

Queensland Urban Utilities collaborates with councils to provide the water supply and wastewater network planning component of the PIPs.

Prior to regulatory reform in 2011, a planning scheme policy or PIP allowed councils to levy infrastructure charges as part of the development assessment process. These charges apply when a development occurs that imposes additional demand on trunk infrastructure networks. This ensures developers contribute their fair share of the cost to support community infrastructure. The 2011 regulatory reforms replaced PIP Infrastructure Charges Schedules with a standard infrastructure charges regime. Chapter 8 presents an overview of the current infrastructure charging process.

Pre-feasibility and detailed feasibility planning

The pre-feasibility process involves a high-level review of the planning assumptions adopted at the master planning stage. This process checks for accuracy and, if necessary, makes adjustments to proposed infrastructure prior to undertaking a complete feasibility investigation.

Detailed feasibility planning further investigates the infrastructure identified in master plans and pre-feasibility for construction in the next three to five years.

At this stage, proposed options are examined in greater detail to identify the optimum network configuration. This may include asset or non-asset solutions, which improve value for money through improving operations or deferring capital expenditure. The detailed feasibility planning process provides a comprehensive outline of infrastructure requirements and more refined estimates. The criteria and rankings used to assist in decision-making may vary according to particular circumstances surrounding the need, such as urgency, technical complexity or community sentiment. However, consideration is always given to a broad range of matters, including the potential environmental and social impacts, and the financial and economic implications.



Brisbane continues to grow.

5.2 Future growth

Brisbane

The resident population of Brisbane was estimated to be about 1.07 million at June 2010. The South East Queensland Regional Plan forecasts Brisbane to grow by approximately 18% to 1.27 million residents by 2031, an increase of 197,000 people. By this time, we will have provided additional connections for an estimated 156,000 dwellings since 2006.

Major projects supporting multiple growth areas

The anticipated population increase by 2031 is about 170,000 people through the areas of Northshore Hamilton, Bowen Hills, Fitzgibbon, West End/ South Brisbane, Woolloongabba, Milton, Toowong/ Auchenflower, Fortitude Valley, Rochedale, Lower Oxley Creek, Australia TradeCoast, Brisbane Airport and Richlands/Wacol. Key projects that will support growth across a number of these areas include:

- Water
 - new main from Murarrie to Pinkenba, including a Brisbane River crossing (2013–2016)
- Wastewater
 - additional sewer tunnel from Cooksley Street to Hamilton Siphon (2020–2025)
 - additional sewer tunnel from Hamilton Siphon to Eagle Farm pump station (2025–2030)
 - additional pressure sewer main from Serpentine Road to Luggage Point WWTP (2020–2025)
 - capacity upgrade to Luggage Point WWTP (2020–2025).

Details of these projects are presented in Appendix D, Table D1. Figures A5 and A6 in Appendix A show Brisbane's proposed infrastructure. Other key projects to support growth in the areas identified are described in the following sections.

The South East Queensland Regional Plan forecasts Brisbane to grow by approximately 18% to 1.27 million residents by 2031, an increase of 197,000 people.



Brisbane's bustling central business district.

Northshore Hamilton Urban Development Area

Northshore Hamilton Urban Development Area is a redevelopment of port land into a high density residential and mixed-use development planned by the Urban Land Development Authority. Its population is expected to increase by 18,000 by 2031. In addition to standard water supply and wastewater services, it will be connected to the Gibson Island WWTP Class A non-drinking water supply network. Key infrastructure requirements include:

- Water
 - extension to the existing Class A non-drinking water network (by developer)
- Wastewater
 - internal trunk gravity sewers discharging to the main sewer in Kingsford Smith Drive (by developer).

Bowen Hills Urban Development Area

Bowen Hills Urban Development Area is a high-density transit oriented development centred around the Bowen Hills railway station, planned by the Urban Land Development Authority. Its population is expected to be 16,000 by 2031. Key infrastructure requirements include:

- Water
 - local water main upgrades (by developer)
- Wastewater
 - Breakfast Creek trunk sewer augmentation (2013-2016)
 - local sewer upgrades (by developer).

Fitzgibbon Urban Development Area

Fitzgibbon Urban Development Area is a low- to medium-density residential development adjacent to the Carseldine railway station and planned by the Urban Land Development Authority. Its population is expected to increase by 6000 people by 2031. Key infrastructure requirements include:

- Water
 - construction of internal water mains (by developer)
- Wastewater
 - construction of connecting sewer in Telegraph Road (by developer)
 - construction of internal sewers (by developer).

West End/South Brisbane

West End/South Brisbane is undergoing major redevelopment, with industrial land along the riverfront transforming to high-density residential apartments, and commercial development up to 30 storeys planned in South Brisbane. Population is expected to increase by another 30,000 by 2031. Key infrastructure requirements include:

- Wastewater
 - Riverside Drive West End sewer upgrade (Phase 1 and 2) (2013-2015 and 2024-2025)
 - Mollison Street South Brisbane sewer upgrade (by developer)
 - new sewer from South Bank under the Brisbane River to North Quay (2013-2015).

Woolloongabba

Woolloongabba is undergoing urban renewal and densification that will see its population increase by 11,000 by 2031 in mixed-use residential and commercial/retail development. Key infrastructure requirements include:

- Water
 - minor local upgrades (by developer)
- Wastewater
 - Woolloongabba sewer catchment augmentation (Parts A and B) (2010–2013)
 - Norman Creek main sewer augmentation, Woolloongabba to Fortitude Valley and New Farm (2016–2017)
 - Caswell Street pump station upgrade (2025–2030).

Milton

The area around Milton railway station will become a transit oriented development, with population increasing by around 2000 by 2031.

Key infrastructure requirements include those mentioned in Appendix D, Table D1 and minor local upgrades that will need to be undertaken by developers.

Toowong/Auchenflower

Toowong/Auchenflower is an urban renewal area that will see transit oriented developments grow around the Toowong and Auchenflower railway stations. The population is expected to increase by 10,000 by 2031. Key infrastructure requirements include:

- Water
 - minor local upgrades (by developer)
- Wastewater
 - Toowong sewer upgrade (2010–2012)
 - Auchenflower branch sewer upgrade (2010–2012)
 - Sylvan Road sewer upgrade (2013–2014).

Fortitude Valley

Fortitude Valley is an urban renewal area that will see redevelopment occur with building heights up to 30 storeys. Development will be mixed use, consisting of commercial, retail, entertainment and residential. Population is expected to increase by 15,000 by 2031.

Key infrastructure requirements include:

- Water
 - minor local upgrades (by developer)
- Wastewater
 - Water Street and Wickham Street sewer upgrade (2013–2015).

Rosedale

Rosedale is a rural area in Brisbane's southeast that will be developed into a master-planned urban community. It will consist primarily of low-density residential development, with some medium-density development clustered around retail centres and main road corridors. There will also be a commercial precinct and a business park. Population is expected to increase by 11,000 residents plus the equivalent of 5000 people in business-related development by 2031. In addition to the standard drinking water supply, Rosedale will be serviced with a reticulated non-drinking water supply, sourced from the Western Corridor Recycled Water Scheme. Key infrastructure requirements for the development include:

- Water
 - new drinking and non-drinking water reservoirs and booster pump stations near Rosedale Road and Miles Platting Road (2013–2014)
 - new non-drinking water trunk main in Miles Platting Road from the Western Corridor Recycled Water Scheme pipeline to the non-drinking water reservoir (2013–2014)
 - new non-drinking water trunk main in Miles Platting Road from the non-drinking water reservoir to Gardner Road (2013–2014)
 - drinking water main augmentation in Grieve Road and Rosedale Road from Mt Gravatt-Capalaba Road to Rosedale drinking water reservoir (by developer)
 - non-drinking water trunk mains to service new development (by developer).
- Wastewater
 - Bulimba Creek trunk sewer augmentation from Padstow Road to Coora Street (2010–2013)
 - Bulimba Creek trunk sewer augmentation from Wecker Road to Old Cleveland Road (2012–2015)
 - extension of the wastewater system into Rosedale (by developer)
 - Gibson Island WWTP upgrade (2016–2021).

Lower Oxley Creek (Oxley Wedge)

Lower Oxley Creek, also known as the Oxley Wedge, consists of the suburbs of Willawong, Pallara, Heathwood and Larapinta. It is predominantly rural at present, with some residential and industrial areas. A large proportion of the rural area is proposed to be urbanised, with primarily low-density residential development and some industrial and commercial precincts.

The population is expected to increase by 10,000 by 2031. It will have a reticulated non-drinking water supply sourced from the Western Corridor Recycled Water Scheme, in addition to the standard drinking water supply. Key infrastructure requirements include:

- Water
 - drinking water trunk main extensions into Oxley Wedge area (by developer)
 - non-drinking water trunk mains in the Oxley Wedge area (by developer)
 - non-drinking water reservoir and connection to the Western Corridor Recycled Water Scheme (timing to be determined)
- Wastewater
 - Archerfield Road pumping station upgrade (2012-2014)
 - trunk sewer extensions into Oxley Wedge area (by developer).

Australia TradeCoast

Australia TradeCoast is an industrial development area that is situated on either side of the Brisbane River at its mouth, and includes the port at Fisherman Islands. While it is already substantially developed, there are still large areas of vacant land, with growth equivalent to 25,000 people expected by 2031. There is currently a network of non-drinking water mains in the area, with water sourced from a Class A producing facility at Gibson Island WWTP, reverse osmosis plants at Luggage Point and Wynnum WWTPs supplying BP and Caltex, and the Western Corridor Recycled Water Scheme. It is planned to expand the non-drinking water network into new development areas, and provide connections to developments with significant non-drinking water demands in established areas. Key infrastructure requirements include:

- Water
 - augmentation of the water main in Pritchard Street, Lytton (2015-2020)
 - non-drinking water main in Lytton Road, Hemmant connecting to Western Corridor Recycled Water Scheme (by developer)

- non-drinking water main in Pritchard Street and Port Drive, Lytton connecting to Wynnum reverse osmosis plant (2015-2020)

Wastewater

- low-pressure sewer systems (by developer).

Brisbane Airport Corporation

The Brisbane Airport Corporation's 2009 Master Plan projects passenger numbers to more than double over the next 20 years. It projects employment numbers to grow from 16,500 to over 50,000, with business, retail, industry and tourism activities complementing and supporting the aeronautical growth. Overall, population is expected to increase by the equivalent of 15,000 people by 2031.

The Brisbane Airport Corporation undertakes significant on-site roof water and stormwater harvesting, and also has a connection to the Gibson Island WWTP Class A non-drinking water supply. It proposes to increase non-drinking water supply by obtaining two connections to the Western Corridor Recycled Water Scheme.

Major infrastructure upgrades required to service the airport's increased demands are augmentation of the Eagle Farm pump station pressure main and Luggage Point WWTP, and construction of a trunk water main across the Brisbane River at Pinkenba, as discussed above. Networks within the airport are owned by the Brisbane Airport Corporation and required upgrades will be its responsibility.

Richlands/Wacol

Richlands/Wacol contains a large area of future industry land within the Bullock Head Creek catchment. Development will be predominantly light and general industry, with some business uses and low- to medium-density residential uses in the vicinity of the proposed Richlands railway station. Overall population is expected to increase by 10,000 by 2031. This will contribute to the requirement to upgrade Wacol WWTP. Key infrastructure requirements include:

- Water
 - water main augmentation Boundary Road, Richlands (by developer)
- Wastewater
 - Sanananda Street pump station upgrade (Stage 1) (2011-2012)
 - Sanananda Street pump station upgrade (Stage 2) (2015-2020)
 - Bullock Head Creek sewer catchment upgrade (by developer)
 - Goodna and Wacol Regional Scheme (2014-2023).



Ipswich's historic centre.

Ipswich

The resident population of Ipswich was estimated to be approximately 168,000 at June 2010. The South East Queensland Regional Plan forecasts Ipswich to grow by about 156% to 435,000 residents by 2031. By this time, we will have provided additional connections for an estimated 118,000 dwellings (100,000 of these will be greenfield development) since 2006.

The city is well positioned to accommodate a large proportion of the SEQ Western Corridor growth. The South East Queensland Regional Plan identifies Ipswich as a major area for future urban development as it offers the opportunity for new businesses, jobs and abundant space for residential development.

Listed below are the major growth areas in Ipswich, their anticipated population growth over the long term, and major water and wastewater infrastructure proposed to cater for the growth. Figures A9 and A10 in Appendix A show Ipswich's proposed infrastructure.

Ipswich Regional Centre

The Ipswich Regional Centre has been identified as a Principal Activity Centre within the South East Queensland Regional Plan activity centre framework. Major growth areas include Springfield, the Ripley Valley, Brassall and Walloon/Thagoona and are anticipated to draw on the Ipswich Regional Centre for key services. The land use within the Ipswich Centre will include medium to high density housing within and adjoining the main commercial areas, government administration, with a concentration of local, state and commonwealth government functions, business and professional services, offices, community and cultural facilities, human services, medical services and facilities, retail and dining.

The major infrastructure required to service this development will be:

- Water
 - local enhancements to water network to suit emerging development (by developer)
- Wastewater
 - augmentation of the trunk sewer from Ipswich CBD to Tivoli (2012-2021)
 - trunk and reticulation sewer mains within the Ipswich CBD (by developer)
 - Bundamba WWTP upgrade (2013-2020).

Ripley Valley

The Ripley Valley Urban Development Area (UDA) covers 4680 hectares and is located adjacent to existing urban development on the southern outskirts of Ipswich City approximately five kilometres south-west of the Ipswich CBD. The Ripley Valley UDA is set to be a model community providing housing for a projected population of 120,000 people in a network of neighbourhoods, centres and villages. The major infrastructure proposed to service this development will be:

- Water
 - new low-level and high-level reservoirs in Ripley Valley (by developer)
 - trunk water mains within the Ripley low-level and high-level water zones (by developer)
 - augmentation of the Ripley trunk water main – Wensley Road and Fischer Road from Reif Street to Binnies Road (2011-2022)



Ipswich and surrounds.

- Wastewater
 - trunk wastewater works from Ripley to Raceview (by developer)
 - augmentation of the Bundamba Creek trunk gravity sewer from Raceview to Bundamba (2011-2019)
 - trunk and reticulation sewer mains within Ripley Valley (by developer)
 - Bundamba WWTP upgrade (2013-2020).

Deebing Creek

Deebing Creek is expected to grow to a population of about 27,700 over the long term. The area is predominately residential development and is located immediately west of the Ripley Valley with a major portion of the development contained within the Ripley Valley Urban Development Area. The major infrastructure proposed to service this development will be:

- Water
 - new high-level reservoir in Deebing Heights (by developer)
 - augmentation of the Ripley trunk water main – Wensley Road and Fischer Road from Reif Street to Binnies Road (2011-2012)
- Wastewater
 - augmentation of the Bundamba Creek trunk gravity sewer from Raceview to Bundamba (2011-2019)
 - trunk and reticulation sewer mains within Deebing Creek catchment (by developer)
 - Bundamba WWTP upgrade (2013-2020)
 - augmentation of Deebing Creek trunk sewer (2011-2016)
 - upgrade of the Lobley Street pump station and rising main (2019-2021).

Swanbank-New Chum Enterprise Park

Swanbank-New Chum Enterprise Park is a 2200-hectare master planned estate with 300 hectares of industrial land available for the development of major industry. The development is located adjacent to the Ripley Valley and has good access to major transport corridors. The ultimate demand is expected to be equivalent to a population of approximately 15,000 people. The major infrastructure proposed to service this development will be:

- Water
 - new low-level reservoirs in Ripley Valley (by developer)
 - new water reservoir for the Redbank Plains high-level zone (2020-2021)
 - trunk water main and pumping station within the Redbank Plains high-level zones (2015-2020)
 - trunk water mains within the Swanbank-New Chum development (by developer)
 - augmentation of the Ripley trunk water main – Wensley Road and Fischer Road from Reif Street to Binnies Road (2011-2022)
 - trunk water mains connecting development to the new Redbank Plains high-level reservoir (by developer)
- Wastewater
 - augmentation of the Bundamba Creek trunk gravity sewer from Raceview to Bundamba (2011-2019)
 - trunk and reticulation mains within the Swanbank-New Chum development (by developer)
 - Bundamba WWTP upgrade (2013-2020).

Amberley RAAF Base and Aerospace and Defence Business Precinct

The Amberley RAAF Base has recently been redeveloped, with the facilities on the base being equivalent in demand to a population of approximately 2000 people. There is a possibility that a further expansion of the base will occur, resulting in an increase in demand equivalent to an additional 4000 people. The base currently manages the treatment of its wastewater.

The Department of Local Government and Planning is presently proposing a specialist support, commercial and industrial development to service the aerospace industry, and specifically the Department of Defence and Amberley RAAF Base.

The ultimate demand from industry in the business precinct is expected to be equivalent to a population of approximately 1500 people.

Discussions have been held with both the Commonwealth and Queensland governments on treating the wastewater from these two sites at a new wastewater centre. The new centre is to be located at the site of the decommissioned Warrill Creek WTP. The major infrastructure proposed to service this development will be:

- Water
 - augmentation of the trunk water main along the Cunningham Highway between Yamanto and Willowbank (by developer)
- Wastewater
 - new wastewater pump station in vicinity of the Amberley RAAF Base and connecting pipework to the Warrill Creek WWTP (to be finalised)
 - new Warrill Creek WWTP (to be finalised).

The construction of these assets will be subject to further negotiations with the Department of Defence and the Queensland Government.

Ebenezer Regional Business and Industrial Area

The Ebenezer Regional Business and Industrial Area is expected to ultimately have an increase in industrial demand equivalent to 75,000 people. Currently, Ipswich City Council development sequencing is planned for beyond 2041, but landholders, including the Queensland Government, have expressed an interest in developing the land earlier. To progress this early development, the Queensland Government is in the process of preparing a concept structure plan for the Ebenezer Regional Business and Industrial Area. The major infrastructure proposed to service this development area will be:

- Water
 - low- and high-level reservoirs (by developer)
 - water pump stations to service reservoirs (by developer)
 - trunk water main from Yamanto (by developer)
 - trunk water main from Mt Crosby via Walloon (by developer)
- Wastewater
 - sewer gravity mains within the development (by developer)
 - wastewater pump stations and associated pressure pipework (by developer)
 - Ebenezer WWTP (post-2041).

Greater Springfield

Greater Springfield is the largest master-planned community development under single ownership in Australia. The current population is estimated to be 20,000 persons and is expected to grow to 86,000 by 2030. In addition to the residential growth, a significant area of land has been allocated for business precincts including retail, commercial, education and healthcare all of which is targeted at generating 30,000 jobs. The major infrastructure proposed to service this development will be:

- Water
 - construction of possibly two elevated reservoirs and booster pumping stations (2011–2017)
 - trunk water mains within the Springfield low- and high-level water zones (by developer)
- Wastewater
 - trunk sewers within the Springfield development area (by developer)
 - augmentation of Woogaroo Creek trunk sewer to operate in parallel with the existing trunk sewer (2011–2014)
 - Goodna WWTP upgrade (2011–2014)
 - Goodna and Wacol Regional Scheme (2014–2023)
 - progressive upgrades of the Brisbane Terrace wastewater pump station.

Lockyer Valley is expected to grow by 66% to 61,000 residents by 2031.



Redbank Plains South

Redbank Plains South is a residential area to the west of Springfield with an estimated long-term population of about 15,000. The majority of the growth is expected to occur prior to 2021. The major infrastructure proposed to service this development will be:

- Water
 - new water reservoir for the Redbank Plains high-level zone (2020-2021)
 - trunk water main and pumping station within the Redbank Plains high-level zones (2015-2020)
- Wastewater
 - augmentation of sections along Six Mile Creek trunk sewer from Redbank Plains to Redbank (2013-2015)
 - Goodna WWTP upgrade (2011-2014)
 - Goodna and Wacol Regional Scheme (2014-2023)
 - upgrade of McAuliffe Street and Six Mile Creek wastewater pump stations (2011-2013).

Redbank Peninsula

Redbank Peninsula is located in close proximity to major road and rail transport infrastructure. It is envisaged that Redbank will become the focus for a mixed business and industry area and possibly adopt a focus towards a freight transfer facility, providing an opportunity for the establishment of transport orientated activities such as warehousing, distribution and wholesaling. The major infrastructure required to service this development will be:

- Water
 - water trunk main from Goodna to Redbank Peninsula (by developer)
 - water mains within the development (by developer)

Wastewater

- Goodna WWTP upgrade (2011-2014)
- Goodna and Wacol Regional Scheme (2014-2023)
- sewer gravity mains within the development (by developer)
- new pressure main and pump station, Redbank Peninsula Industrial Area (2016-2017 and by developer).

Walloon/Thagoona

The Walloon/Thagoona area is a large residential area adjoining Rosewood to the west of the Ipswich CBD. The area is estimated to grow to a residential population of 45,000 with the majority of this growth occurring after 2021. The area is currently unsewered. The major infrastructure proposed to service this development will be:

- Water
 - new water reservoir for Walloon (2015-2016)
 - trunk water main within the Walloon, Haigslea and Rosewood water supply zones (2014-2017)
 - new water supply pump station at Walloon for Haigslea and Rosewood (2014-15)
- Wastewater
 - new wastewater pump stations and pressure mains (by developer)
 - new trunk gravity and rising main from Walloon to Rosewood (by developer)
 - Rosewood WWTP enhancement (2015-2019).



Farming in the Lockyer Valley. Image courtesy of J Holstein.

Lockyer Valley

The resident population of Lockyer Valley was estimated to be approximately 36,600 at June 2010. The South East Queensland Regional Plan forecasts Lockyer Valley to grow by approximately 66% to 61,000 residents by 2031.

Listed below are the major growth areas in Lockyer Valley and the ultimate expected growth for each. Master planning for Lockyer Valley is currently underway and preliminary outcomes for the key water and wastewater infrastructure required to cater for key growth areas are presented below.

Gatton

Gatton is expected to accommodate the majority of the proposed growth in the Lockyer Valley. The proposed Woodlands Rise development is expected to double the size of the Gatton township, with around 3800 residential allotments and a commercial precinct. The new prison and the planned expansion of the University of Queensland Gatton Campus are also expected to contribute to future population growth in the area. The major infrastructure proposed to service this development will be:

- Water
 - staged upgrade of trunk main from Tarampa to Glenore Grove pump station (2021, 2031 and 2041)
 - staged upgrade of trunk main from Glenore Grove pump station to Gatton (2031 and 2041)
 - upgrade of Glenore Grove pump station (2031)
 - water trunk main from Gatton to Woodlands development (by developer)
 - new reservoir south of Gatton, including pump station and trunk mains (by developer)
- Wastewater
 - upgrade/duplication of the Gatton 'A' pump station at the end of Eastern Drive and the rising main from Gatton 'A' Pump Station to the Gatton WWTP (2012-2016)

- various mains and pump station upgrades for new developments
- Gatton WWTP enhancement.

Laidley

Laidley is expected to experience moderate growth, with an approximate 50% increase in population over the next 15-20 years. The major infrastructure proposed to service this development will be:

- Water
 - staged upgrade of trunk main from Tarampa to Glenore Grove pump station (2021, 2031 and 2041)
 - staged upgrade of trunk main from Glenore Grove pump station to Laidley via Plainland (2014-2021)
 - upgrade of Glenore Grove pump station (2031)
- Wastewater
 - upgrade of the Pike Street pump station (2013-2015)
 - new gravity trunk mains to service Laidley northeastern residential development areas (by developer)
 - a regional wastewater transfer scheme allowing wastewater from Laidley, Forest Hill and Plainland to be treated at the enhanced Gatton WWTP.

Plainland

Plainland is expected to experience significant growth in the future with the area accommodating commercial and some high-density residential development. A sewerage scheme is to be delivered to service land immediately adjacent to the Plainland highway interchange. This new scheme will connect the existing commercial developments as well as the proposed commercial and residential developments in the immediate area to the regional wastewater transfer scheme. This scheme will also service Laidley and Forest Hill.

The major infrastructure proposed to service this development will be:

- Water
 - staged upgrade of trunk main from Tarampa to Glenore Grove pump station (2021, 2031 and 2041)
 - staged upgrade of trunk main from Glenore Grove pump station to Plainland (2016 and 2021)
 - upgrade of Glenore Grove pump station (2031)
- Wastewater
 - Plainland Sewerage Scheme (2011-2014).

Withcott and Helidon

Withcott and Helidon are expected to experience moderate population growth. Withcott will accommodate commercial and residential development whereas Helidon will be predominately residential growth. The major infrastructure proposed to service these development areas will be:

- Water
 - staged upgrade of trunk main from Gatton to Helidon (2041 and 2051)
 - duplication of trunk main servicing Seventeen Mile Road Reservoir, Helidon (2021).

Queensland Urban Utilities is currently investigating the provision of a wastewater treatment system and sewer network to service the commercial and industrial land in Withcott immediately adjacent to the Warrego Highway. If approved, this new facility will treat the wastewater from the existing commercial and industrial developments as well as the proposed developments.

Grantham

During the January 2011 flood event Grantham was significantly inundated throughout its low lying areas resulting in widespread damage to properties. The Lockyer Valley Regional Council has acquired higher elevated land to relocate low-lying properties away from the risk of flooding. Additional lots will also be developed.

- Water
 - new area to be serviced by Lockyer Valley trunk main, supplied by Lowood WTP
- Wastewater
 - new area will be serviced via reticulated wastewater network that drains to a local package treatment plant; recycled water may also be available from this plant.

Scenic Rim

The resident population of Scenic Rim was estimated to be approximately 38,300 at June 2010. The South East Queensland Regional Plan forecasts Scenic Rim to grow by approximately 85% to 71,000 residents by 2031.

Beaudesert and Bromelton are identified as growth areas in need of substantial infrastructure extensions under the South East Queensland Regional Plan. Listed are the major growth areas in Scenic Rim, their anticipated growth over the long term, and the major water and wastewater infrastructure required to cater for the growth.

Beaudesert and Bromelton

Beaudesert is expected to experience the highest level of growth in Scenic Rim, with an expected increase in population of 25,000 by 2031.

Bromelton is expected to have a population of 16,000 over the long term, with the majority of the growth being attributed to the planned Bromelton State Development Area which is expected to commence within the next five years.

The Beaudesert WWTP currently services the Beaudesert locality. The ultimate solution for the Beaudesert region is a new WWTP to be constructed in the Bromelton State Development area. This will service population growth in the Beaudesert region and the Bromelton State Development Area.

The major infrastructure proposed to service developments in this area will be:

- Water
 - new Beaudesert South Reservoir (2013-2014)
 - main from Helen Street WTP to proposed Reservoir site (2015-2016)
- Wastewater
 - Interim upgrade of Beaudesert WWTP (2011-2014)
 - Bromelton Regional WWTP upgrade (2011-2019).

Canungra

Canungra is expected to have an increase in population of 1850 people by 2031. Canungra requires additional water treatment capacity and increased water storage to support population growth. Queensland Urban Utilities will work with the Queensland Water Commission to develop a strategy for providing a reliable water supply to Canungra which meets desired standards of service.

The major infrastructure proposed to service this



Looking out over Somerset region. Image courtesy of Somerset Regional Council.

development will be:

- Water
 - new main from new WTP (2012-2014)
- Wastewater
 - Canungra WWTP upgrade (completion March 2012).

Kalbar

Kalbar is expected to have an increase in population of 1700 people by 2031. The major infrastructure proposed to service this development will be:

- Wastewater
 - Kalbar WWTP enhancement (2011-2012).

Boonah

Boonah is expected to have an increase in population of 2770 people by 2031. The major infrastructure proposed to service this development will be:

- Wastewater
 - Boonah WWTP upgrade (completed June 2011).

Somerset

The resident population of Somerset was estimated to be approximately 22,500 at June 2010. The South East Queensland Regional Plan forecasts Somerset to grow by approximately 51% to 34,000 residents by 2031.

Listed below are major growth areas in Somerset, their anticipated long-term growth, and the major water and wastewater infrastructure required to cater for the growth.

Fernvale

Fernvale is currently experiencing unprecedented growth, with an anticipated population increase of 3600 people by 2026. The major infrastructure proposed to service this development will be:

- Wastewater
 - Fernvale and Lowood Regional Scheme, network and treatment augmentations (2011-2014)
 - Fernvale gravity trunk sewer upgrade (2016 and 2026).

Lowood

Lowood is expected to increase in population by 2500 people before 2026. The major infrastructure proposed to service this development will be:

- Wastewater
 - Fernvale and Lowood Regional Scheme, network and treatment augmentations (2011-2014)
 - Lowood catchment upgrade (Eagle Rise Development) (2011-2015).

Kilcoy

Kilcoy is expected to increase in population by 1400 people by 2026. The major infrastructure proposed to service this development will be:

- Water
 - system modifications and improvements to accommodate the new Seqwater WTP.
- Wastewater
 - Kilcoy WWTP upgrade (2012-2016)
 - upgrade trunk gravity main (2012-2014 and by developer)
 - Hope Street pump station upgrade (2010-2011).

A number of programs exist to provide system-wide improvements to the existing network.

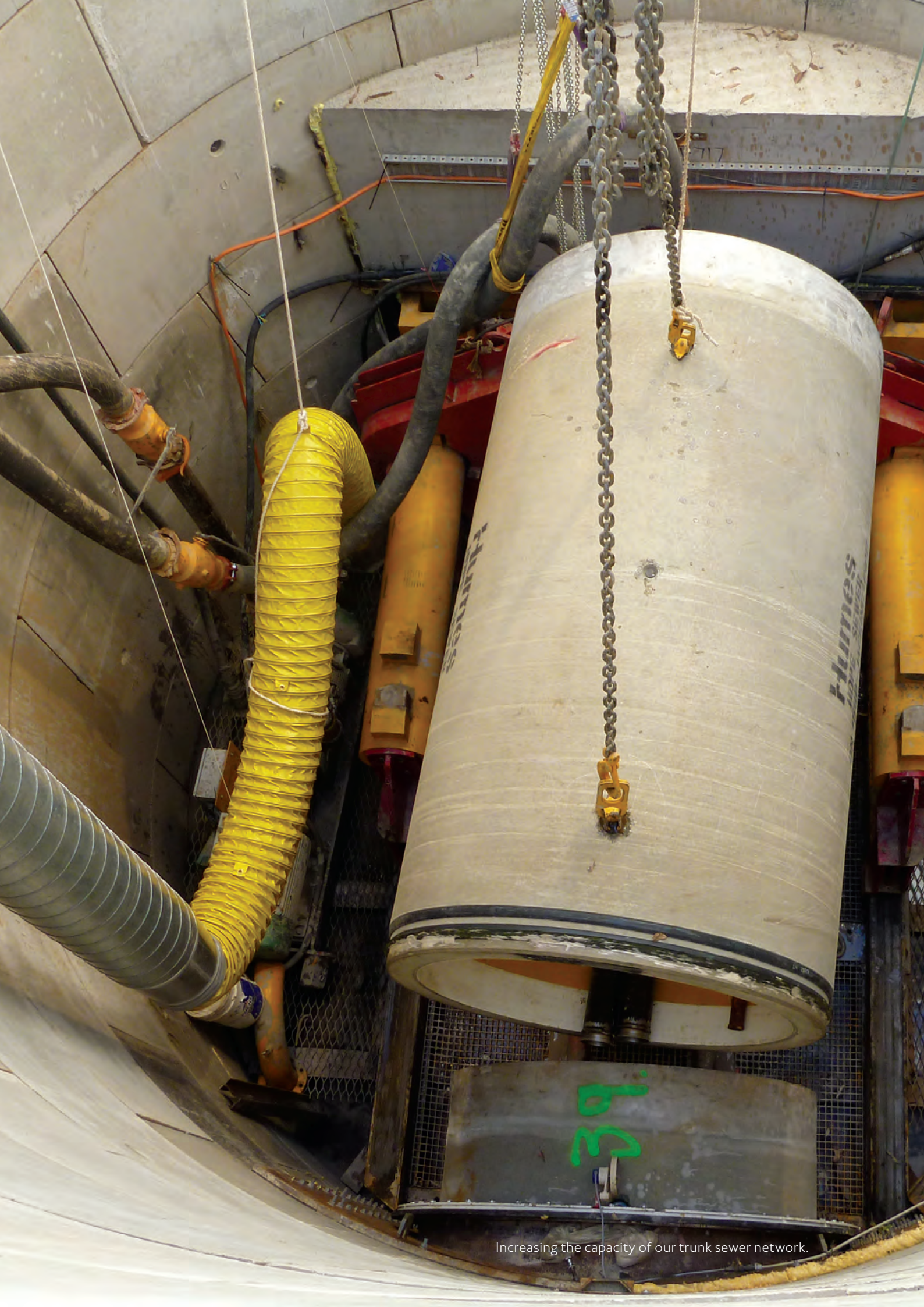
5.3 Whole of network

Queensland Urban Utilities has considered a number of other key factors in developing new infrastructure projects. These include:

- **renewals** – investing in the renewal or rehabilitation of ageing infrastructure assets to minimise the consequences of failures and to ensure customers continue to receive a safe and reliable service into the future.
- **improvements** – improving service levels and reliability of services by:
 - implementation of new technologies to enhance service performance
 - improved operability of equipment to increase reliability of service
 - enhancement of existing processes to improve product quality or operational efficiency
- **compliance** – meeting price monitoring or legislative obligations.

Queensland Urban Utilities has established a number of programs to provide system-wide improvements to the existing network. These include pressure reduction and leakage management, drought mitigation, wastewater inter-catchment transfer opportunities, burst main replacements, and meter replacement programs. Figure B1 in Appendix B shows the proposed five-year capital investment for our renewal programs as of 1 July 2011.





Increasing the capacity of our trunk sewer network.



QUEENSLAND
UrbanUtilities

6. OUR CUSTOMER SERVICE STANDARDS

There is a direct relationship between the standards of service our customers receive and our investment in maintaining and improving our infrastructure.

Our Customer Charter, available on our website, summarises these infrastructure-based standards as well as describing standards for the other services we provide.

As of January 2011, a single set of customer service standards apply to our customers. These standards are summarised in Table 9.



We strive to provide a safe, secure and reliable service to our customers.



Table 9 – Queensland Urban Utilities Customer Service Standards

Service	Definition	Queensland Urban Utilities Service Standard
Water quality		
Drinking water quality standard	The Australian Drinking Water Guidelines specified by the National Health and Medical Research Council, against which Queensland Urban Utilities measures the verification of water quality.	National Health and Medical Research Council, Australian Drinking Water Guidelines
Water quality complaints per 1000 properties per year	<p>The total number of complaints received by Queensland Urban Utilities requiring further investigation that relate to water quality, including water quality complaints resulting from operational practices. With respect to water quality, this is any complaint regarding:</p> <ul style="list-style-type: none"> • discolouration • taste • odour • stained washing • illness, or cloudy water (e.g. caused by oxygenation), etc. <p>It excludes complaints relating to:</p> <ul style="list-style-type: none"> • service interruption • adequacy of service • restrictions • pressure and leakage. <p>Complaints that require further investigation are those where the recommended action by Queensland Urban Utilities does not quickly solve the customer's concern. For example, a recommendation to address discolouration would be to run the tap for a minute. If effective, a complaint requesting service would not be recorded.</p>	Less than or equal to eight water quality complaints per 1000 properties per year
Water quality incidents per 1000 properties per year	An incident is any event affecting Queensland Urban Utilities' infrastructure, which adversely affects the water quality delivered to customers, and to which water quality complaints can be attributed.	Less than or equal to 10 water quality incidents per 1000 properties per year
Water supply		
Water pressure	The minimum pressure that customers can expect to receive at the connection to the property.	<p>Urban areas – minimum 210kPa (kilopascals)</p> <p>Trickle feed areas and private booster – minimum 100kPa</p>
Water volume	The minimum flow rate that customers can expect to receive at the connection to the property.	<p>Urban areas – 25 litres per minute</p> <p>Trickle feed areas – minimum 3.2 litres per minute</p>



Reporting on our customer service standards.

Table 9 continued

Service	Definition	Queensland Urban Utilities Service Standard
Customer service		
Calls answered (Grade of Service)	The percentage of calls answered within 30 seconds.	To have 80% of calls answered within 30 seconds
Service connections		
Time to commence work following customer payment	The time to install a new service connection.	Timeframe to be 15 working days, 95% of the time
Continuity of supply and notification of interruptions		
Number of unplanned water interruptions per 1000 connections per year.	<p>An unplanned water supply interruption occurs when the property is without a service due to any cause, excluding the following:</p> <ul style="list-style-type: none"> property service connection interruptions (unless the burst or leak requires the water main to be shut down for repair and therefore affects multiple customers) interruptions that cause some reduction to the level of service but where normal activities (shower, washing machine, toilet flushing, etc.) are still possible breaks in house connection pipes or mains planned interruptions. <p>An unplanned water supply interruption is when the customer has not received at least 48 hours notification (or as otherwise prescribed by regulatory requirements) of the interruption. It also includes situations where the duration of a planned interruption exceeds that which was originally notified. In this circumstance the duration of the entire interruption is referenced. All un-notified interruptions caused by third parties should be included.</p>	Less than or equal to 100 unplanned water interruptions per 1000 connections per year
Restoration of supply after unplanned interruptions	Restoration occurs where all interrupted connections are restored to normal service, that is, regardless of whether connections are progressively restored, for example, due to location of isolation valves.	Less than five hours on 90% of occasions
Response to urgent incidents	The response time is determined as the time it takes the utility to attend to the incident, measured from the time of the customer request to the time taken to determine appropriate restoration action.	Urban areas – less than one hour Rural areas – less than two hours
Response to non-urgent incidents	Response time to non-urgent incidents is determined as the time it takes the utility to attend to the incident, measured from the time of the customer request to the time taken to determine appropriate restoration action.	Urban areas – less than 24 hours Rural areas – less than 72 hours
Notification of planned interruptions	Planned interruption is when the customer is given notification of the interruption as it is part of organised works. Planned work of which the customer is not notified is an unplanned interruption.	Minimum of 48 hours



A woman with short brown hair, wearing a white button-down shirt, is looking down at a document. The image is partially obscured by a large, light green, semi-transparent geometric shape that overlaps the text area.

7. GAINING ACCESS TO OUR NETWORK – CONNECTIONS POLICY

Queensland Urban Utilities' Connections Policy has three main elements.

- It describes the geographic area in which we will provide for new water and wastewater connections.
- It outlines the criteria which must be met for new connections within this area.
- It describes the circumstances in which we may provide new connections outside this area.

A connection is the metered connection between a privately-owned property and Queensland Urban Utilities' water and wastewater pipe network. Once the connection is in place our customers can receive water and wastewater services.

Our water and wastewater service areas are shown in Figures A17 and A18 in Appendix A.

The water industry within South East Queensland is currently working to produce a common set of legally-recognised design and construction technical standards



7.1 Customers seeking connection

There are two general types of customer seeking connection.

1. Developers of new properties

A developer is an individual or entity who develops land and/or constructs buildings generally for residential, commercial or industrial purposes. Connections associated with developers can have wider implications on the performance and level of service our systems can provide.

2. Owners of existing properties

An owner of an existing property may be:

- a customer moving into a newly-built property. Most new properties and subdivisions already have a connection, however a single block of land may not. Customers can check with us to find out whether or not the property has a water or wastewater connection.
- a customer changing the use of an existing property (i.e. changing the use of the land).

7.2 Our service area

Queensland Urban Utilities provides connections to all properties within our service area. Generally these are properties that are within a 100m radius of our water and wastewater infrastructure.

Our service area is distinct from our geographic area, which is the area surrounded by the borders of our five participating councils. Figures A17 and A18 in Appendix A provide a representation of our service areas as at 1 February 2011. These maps are indicative only, with further details available through our office.

For the period from 1 July 2010 through to formal approval of the Water Netserv Plan, our service area is effectively the combined declared service areas of our five participating councils, as described in the *Water Supply (Safety and Reliability) Act 2008*.

7.3 Organising your connection

Depending on where your property is located, your request for connection will be processed either by our eastern or western team.

- The Eastern Service Area team handles requests for Brisbane.
- The Western Service Area team handles requests for Ipswich, Lockyer, Scenic Rim and Somerset.

Establishing a new connection will generally involve the following steps.

1. Lodging your application for connection.
2. Assessing the application and preparing a quote for design and/or construction of the connection.
3. Customer payment to connect and scheduling for inspection and/or construction.

Application requirements

Applications for new connections generally require:

- designs and plans with all applications, except for standard connections within our Western Service Area
- notification of any relevant planning instruments (with development conditions and stamped plans)
- details of infrastructure agreements.

Queensland Urban Utilities will generally process applications within two to three working days.



Regular site inspections help customers manage their water and wastewater needs.

Quote for design and construction

Queensland Urban Utilities provides a service to produce designs and plans. Alternatively, an applicant may decide to engage a private consultant to undertake this work.

Designs and plans must be produced and approved against the mandatory Operational Works Development Assessment Conditions set out by the relevant council's Development Assessment Branch.

Participating councils are not required to seek approval from Queensland Urban Utilities for standard connection types, however they must seek approval of designs and plans if applicants wish to construct a non-standard connection.

Costs to connect

Queensland Urban Utilities always provides individual quotations to construct new connections. The cost of new connections can vary considerably in terms of the size, ease of access, the length of service connection between our network and private properties, and other site conditions.

Charges for access and services for new connections generally commence when the construction of the connection is completed and the service is brought online.

Constructing your connection

Once payment has been made for the construction quote and local government approval has been granted, we will organise a date to build the connection. Work will usually start about 15 days after we have received payment. Alternatively, if the connection is constructed by a private company, we will arrange to inspect the completed works.

Further details on how to connect, application requirements, payment options and construction of your connection can be provided by contacting us on 13 26 57, or by visiting our website at www.urbanutilities.com.au

7.4 Standards and guidelines for connection

To ensure a safe and reliable connection is installed, designs and construction must comply with Queensland Urban Utilities' standards, and with any conditions placed on the work from the Development Approval process.

Our current standards and requirements include:

- Queensland Urban Utilities Water Standards, incorporating Water Services Association of Australia codes
- Queensland Urban Utilities Sewerage Standards, incorporating Water Services Association of Australia codes
- Other applicable Queensland Urban Utilities standards and guidelines.

Where practical, development approved by council water businesses before 30 June 2010 will have five years to meet the connection requirements outlined in our current connections policy.

Queensland Urban Utilities, Allconnex Water and Unitywater are working collaboratively to produce a common set of legally-recognised design and construction standards (Design and Construction Code). This code will achieve a consistent approach to the way we design and construct water and wastewater infrastructure.



An effective Pressure Reduction and Leakage Management Program saves water and reduces bursts.

7.5 Connections outside the current area

Land or property owners outside our current service area, but within our geographic boundary, may ask us to extend our network to service their properties. Queensland Urban Utilities may provide connection outside our area, however, these decisions are made on a case-by-case basis, taking into account a variety of factors, including:

- the applicant's acceptance of the cost before construction starts
- our capacity to fund our share of the cost (if any)
- the wider system's capacity to handle new services at the desired connection point
- the total cost of the extension and any additional works necessary to provide further capacity
- the number of applicants proposed for immediate connection
- the probable number of applications for future connections, and the prospective timeframe
- whether or not the local government supports any applications for properties to be connected to the extension on health and environment grounds
- the current value of our estimated contribution against future revenue.

Our Customer Service Standards only apply within our service area. Service standards for connections outside this area will be negotiated with applicants on a case-by-case basis.

Connection in new areas may result in the extension of our service area. Such extensions are generally managed through state and local government planning activities under the *Sustainable Planning Act 2009*.

7.6 Trade waste

Trade waste is water-borne waste from a commercial or industrial business, other than:

- waste that is prohibited substance (e.g. petrol, pesticide)
- domestic wastewater (e.g. human waste)
- stormwater.

Business customers seeking connection to our wastewater network should be aware that illegal dumping of trade waste can have a serious effect on the environment, wastewater infrastructure and the health and safety of people.

The owners/occupants of properties who discharge trade waste into our wastewater network are required to have a trade waste approval document issued by Queensland Urban Utilities.

Approvals are issued with terms and conditions that include:

- quantity and quality limits and quantity measurements
- discharge time limits
- assessment of trade waste charges
- waste treatment
- trade waste effluent sampling
- maintenance of infrastructure
- entry of premises
- obligations of the approval holder (general limitations)
- other special conditions.

Illegal dumping of trade waste can have a serious effect on the environment, wastewater infrastructure, and the health and safety of people.

7.7 Restrictions on water supply

We generally do not disconnect residential properties from our network. Where a property use or ownership changes, the connection infrastructure and connection point is generally transferred to the new property user or owner, or left available for future use.

In the case of unpaid bills or breach of water restrictions, we will provide notification of the potential restriction of domestic water supply to the property. On restriction, the property will still have access to the minimum water supply level necessary for health and safety purposes, as detailed under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009*.

It is our policy to attempt to contact the owner and/or the occupant prior to restricting supply.

We may disconnect or restrict non-domestic water supplies if:

- a property's plumbing is illegal or unauthorised
- trade waste is discharged into our wastewater system without a trade waste approval or agreement in place
- a backflow prevention containment device is not installed when required
- recycled water is used inappropriately
- breach of water restrictions
- unpaid accounts.

7.8 Financial Hardship Policy

Queensland Urban Utilities has a Financial Hardship Policy that recognises from time to time customers may have difficulty paying their water or wastewater bill. We encourage customers having difficulty to contact us at the earliest opportunity to discuss and agree on an appropriate payment schedule.

7.9 Late bill payments

We will apply 11% interest per annum to all bills that have not been paid within 30 days of the date of issue. Interest is compounded daily.

Has your water consumption increased?

Dear Customer

A Queensland Urban Utilities officer visited this property to read your water meter on / / .
As a courtesy we want to draw this to your attention that your water consumption has increased.
We've included inside this card easy step-by-step instructions on how you can test for leaks using your water meter.
By identifying and fixing leaks you'll save water and help reduce your water bill so do a test today.

 QUEENSLAND
UrbanUtilities
ABN 12 0112 7188 100

 QUEENSLAND
UrbanUtilities

Helping customers keep track of
their water consumption.



8. HOW WE CHARGE FOR OUR SERVICES

To provide our services, including funding the development and maintenance of our water and wastewater networks, there are three types of charges we make to our customers.

- **Connection charges** are made to customers seeking new physical connections to the water or wastewater network. These charges relate to the costs of constructing connection infrastructure between our mains and the customer's property boundary.
- **Service charges** are made to customers who are connected to our network and/or within our service area. These charges relate to the cost of water provided, and the shared costs of maintaining infrastructure to deliver water, and collect and treat wastewater.
- **Infrastructure charges** are made to customers who are developing new properties that require extensions and expansions of our network.

The charges presented in this chapter are current from 1 July 2011 to 30 June 2012.

In June 2011 the Queensland Government passed the *Fairer Water Prices for SEQ Amendment Act 2011* (FWP Act), which directly impacts the way Queensland Urban Utilities sets its service charges. Key aspects relating to the legislative changes include:

- imposing an interim cap on price increases for retail and small business customers for 2011/12 and 2012/13
- requiring participating councils to prepare a price mitigation plan and a price path for the five-year period commencing 2013/14

The recent Commonwealth Government announcement on the climate change framework and carbon pricing will continue to be monitored in terms of the potential price impact on our customers. In the absence of detailed information about the implementation of carbon pricing, Queensland Urban Utilities has not included the impact of a carbon price in its forecasts.

As part of the transition from five council water businesses to a single statutory authority, Queensland Urban Utilities' charges will continue to vary across our five districts – Brisbane, Ipswich, Lockyer Valley, Scenic Rim and Somerset.

Appendix C summarises the detailed charges referred to in this chapter.

8.1 Connection charges

We charge our customers to connect into the water and wastewater network. The processes for determining connection charges have been carried over from the councils, so they vary from district to district.

The specific circumstances of a customer's property and nearby water and wastewater mains may vary considerably – hence the cost of construction of infrastructure between the property and the mains is often factored individually (i.e. by quotation). Factors considered during quotation for water connections include the location of the property, the type (e.g. general, fire) and size of connection, the location of the nearest connection point, the condition of the site, and other matters. For sewer connections, consideration is given to the location of the property, the size and design of the connection, the location of the nearest connection point, the condition of the site, and other matters.

8.2 Service charges

We levy service charges on residential and commercial properties for water supply, wastewater, trade waste and recycled water services. These water and wastewater charges are displayed on our customers' water bills, and may vary from district to district. Businesses may also be charged for the disposal of trade waste.

Our prices

For the 2011/12 and 2012/13 financial years, the interim cap on price increases are as follows:

- for 2011/12, not more than 3.6% above the base charge for 2010/11
- for 2012/13, not more than the percentage represented by the consumer price index above the base charge for 2011/12

Participating councils have prepared a Price Mitigation Plan to minimise the impact of water and wastewater price increases to the community. Among other things, the Plan addresses:

- policies to assist particular customer groups, such as pensioners
- how the community will be kept informed on price adjustments.

Currently, Queensland Urban Utilities' prices reflect the price structures inherited from the five participating councils. This includes a variety of sub-district prices that existed prior to council amalgamations in March 2008. As part of an agreement to a final price path (1 July 2013 to 30 June 2018), the participating councils and Queensland Urban Utilities will review the historical structure to produce a simplified set of prices.

Water services charges

The water service charges are made up of three parts.

1. **Queensland Government bulk water charge** – reflects the cost of drinking water purchased from the South East Queensland Water Grid Manager. This charge is set by the Queensland Government, based on recommendations made by the Queensland Water Commission.
2. **Water access charge** – contributes to the cost of the storage facilities, and pumps and pipes that deliver water to your home.
3. **Tiered consumption charge** – contributes to the cost of maintaining and moving water around the network. Water charges are tiered so that the more water you use the more you pay. These charges encourage customers to use water efficiently, and ensure high-volume users contribute their share.

A summary of the residential and commercial water and wastewater service charges are presented in tables 10 and 11 respectively. A full summary of all other services charges is presented in Appendix C.



Somerset Dam. Image courtesy of Somerset Regional Council.

Table 10 – Summary of residential water and sewerage charges by district (2011/12)

		Brisbane	Ipswich	Lockyer Valley	Scenic Rim	Somerset
Queensland Government Bulk Water	(\$/kL)	1.787	1.723	1.98	2.087	2.356
Water Access [†]	(\$/qtr)	41.79	70.00	70.00 Full pressure 51.87 Constant flow	70.00	70.00
Water Usage Tier 1	(\$/kL)	0.6669 (first 255kL pa)	0.81054 (first 320kL pa)	0.22572 (first 300kL pa)	0.83106	0.23598 (first 300kL pa)
Water Usage Tier 2	(\$/kL)	0.70794 (256–310kL pa)	1.29276 (321–480kL pa)	1.08756 (above 300kL pa)	-	0.54378 (above 300kL pa)
Water Usage Tier 3	(\$/kL)	1.26198 (above 310kL pa)	1.64160 (above 480kL pa)	-	-	-
Sewerage Access*	(\$/qtr)	118.98	137.50	105.21	125.00	See Table C37

[†]Charges for first standard connection only.

*Charges for first pedestal only.

Table 11 – Summary of commercial water and sewerage charges by district (2011/12)

		Brisbane	Ipswich	Lockyer Valley	Scenic Rim	Somerset
Queensland Government Bulk Water	(\$/kL)	1.787	1.723	1.98	2.087	2.356
Water Access [†]	(\$/qtr)	41.79	84.84	See Tables C22 to C26	87.75	73.71
Water Usage Tier 1	(\$/kL)	0.79002 (first 200kL pa)	0.81054 (first 320kL pa)	0.4418 (first 300kL pa)	0.83106	0.23598 (first 300kL pa)
Water Usage Tier 2	(\$/kL)	0.90288 (201–300kL pa)	1.64160 (above 320kL pa)	0.87210 (above 300kL pa)	–	0.54378 (above 300kL pa)
Water Usage Tier 3	(\$/kL)	1.32354 (above 300kL pa)	–	–	–	–
Sewerage Access*	(\$/qtr)	118.98	141.99	See Tables C22 to C26	129.72	See Tables C39 to C42

[†]Charges for first standard connection only.

*Charges for first pedestal only.

Wastewater service charges

For domestic users, wastewater is charged at a fixed rate that contributes to wastewater treatment and maintaining the wastewater network. Businesses are generally charged an additional amount, based on the number of pedestals on the property.

The wastewater service charges for each district are summarised in Table 11.

Trade waste service charges

Pricing for trade waste varies for a number of reasons. Not all WWTPs in all districts are capable of accepting and treating various types and quantities of trade waste.

In the Brisbane district, trade waste disposal charges are based on a user-pays system. Businesses and industries are assigned to one of four categories based on the type of trade waste generated on site. Refer to Appendix C, Table C7 for further details. Charges vary according to the category to reflect the cost of services. Similarly, in the Ipswich district, charges are determined according to the volume and composition of the wastewater. Refer to Appendix C, Table C16 for details on trade waste charges for the Ipswich district.

Recycled water service charges

Customers in the Brisbane and Ipswich districts have access to various types of recycled water.

Brisbane

Five WWTPs produce Class A recycled water for supply to approved customers for non-residential purposes. Class A recycled water is charged at \$1.10/kL.

High quality, demineralised, recycled water is supplied to BP and Caltex.

Treated wastewater is supplied to the Western Corridor Recycled Water Scheme.

Ipswich

Class A recycled water is supplied to the Springfield Recycled Water Zone at \$1.638/kL.

Class B recycled water is charged at \$1.02/kL and supplied to approved water carriers from one tanker filling point at Bundamba WWTP.



Sunset over Lake Apex, Gatton. Image courtesy of Lockyer Valley Regional Council.

8.3 Infrastructure charges

The Sustainable Planning Act 2009 was amended to enable the introduction of a new standard infrastructure charges regime from 1 July 2011. The amendments set maximum standard infrastructure charges which cover a range of infrastructure networks including water and wastewater. The councils have the option to adopt the maximum charge, or a lesser charge. In July 2011, Queensland Urban Utilities and the participating councils of Brisbane, Scenic Rim, Lockyer Valley, and Somerset agreed on the proportion of the adopted infrastructure charge for water and wastewater networks. Negotiations are continuing for Ipswich City Council. The amended Act replaces all previous infrastructure charging mechanisms for new developments. Infrastructure charges imposed prior to the commencement of the resolution will remain valid and binding.

In some cases developers may be required to construct trunk infrastructure as an alternative to paying an adopted infrastructure charge. The value of trunk infrastructure provided can be offset against the adopted infrastructure charge. Queensland Urban Utilities may prepare an infrastructure agreement with a developer, which sets out the terms for reimbursement of a developer's costs that are in excess of the adopted infrastructure charge.

Queensland Urban Utilities' adopted infrastructure charges are presented in tables Tables C43 to C56 in Appendix C.

The Queensland
Competition Authority
will monitor water and
wastewater pricing.





PART B – OPERATIONAL AND TECHNICAL PLANS

9. OPERATIONAL AND TECHNICAL PLANS

This section introduces Part B of the Plan, which focuses on Queensland Urban Utilities' operational frameworks, high-level processes, and performance and management functions. Part B presents an overview of how we plan and provide new infrastructure, and maintain and operate existing infrastructure, to comply with regulatory requirements and achieve Customer Service Standards. It will streamline existing regulatory plans required by our organisation.

9.1 Part B requirements

For the period from the establishment of Queensland Urban Utilities on 1 July 2010 to the completion of a fully compliant Plan (required by 1 July 2013), we will continue to use our current strategic asset and total management plans.

Our current management plans are generally highly technical in nature, and are primarily focused on compliance with guidelines provided by the Queensland Government.

These plans are currently being compiled to form Part B of the Plan.

The key aspects to be addressed under Part B include:

- how ecological sustainability will be achieved
- how to meet performance targets and service standards
- how we provide for new infrastructure and maintain and replace our existing assets
- measures to minimise water losses and sewage overflows
- drinking water quality management measures
- total water cycle management for water and wastewater
- trade waste management measures
- recycled water management measures.

9.2 Management plans included in Part B

The key regulatory documents previously prepared by water businesses of the Brisbane, Ipswich, Lockyer Valley and Somerset councils remain current until 31 December 2012. The regulatory documents governing the water business in the Scenic Rim Regional Council area remain current to 31 December 2013.

The key regulatory management plans in place that reflect the legislative requirements for Part B of the Plan are summarised in the following table.



Our environmental practices ensure a safe water system for flora and fauna as well as for the community.

Table 12 – Summary of Part B requirements

Legislative description	Current relevant plans
Outline existing and proposed infrastructure for the provision of services, indicating how the distributor-retailer: <ul style="list-style-type: none">will meet performance targets and service standards relating to operation, maintenance and replacement of existing infrastructurewill provide new infrastructure to meet future development and growth.	<ul style="list-style-type: none">Infrastructure plans (PSPs and PIPs)Asset evaluation and renewal plansMaintenance management plans
Measures to minimise water losses caused by leakage and sewage overflows.	<ul style="list-style-type: none">System leakage management plansWater loss management plansSewer inflow infiltration management plans
Drinking water quality management measures to protect public health.	<ul style="list-style-type: none">Drinking water quality management plans
Information about how the Water Netserv Plan will provide for total water cycle management for water and wastewater in its area.	<ul style="list-style-type: none">Water demand management plans
Information about how Queensland Urban Utilities will seek to achieve ecological sustainability in undertaking its functions.	<ul style="list-style-type: none">Environmental management plansBio-solids management plansEnergy management plans
Information about trade waste management for Queensland Urban Utilities’ wastewater services.	<ul style="list-style-type: none">Trade waste management plans
Information about managing Queensland Urban Utilities’ recycled water.	<ul style="list-style-type: none">Effluent management plans

APPENDIX A

MAPS

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FIGURE A1 –
QUEENSLAND URBAN UTILITIES WATER NETWORK

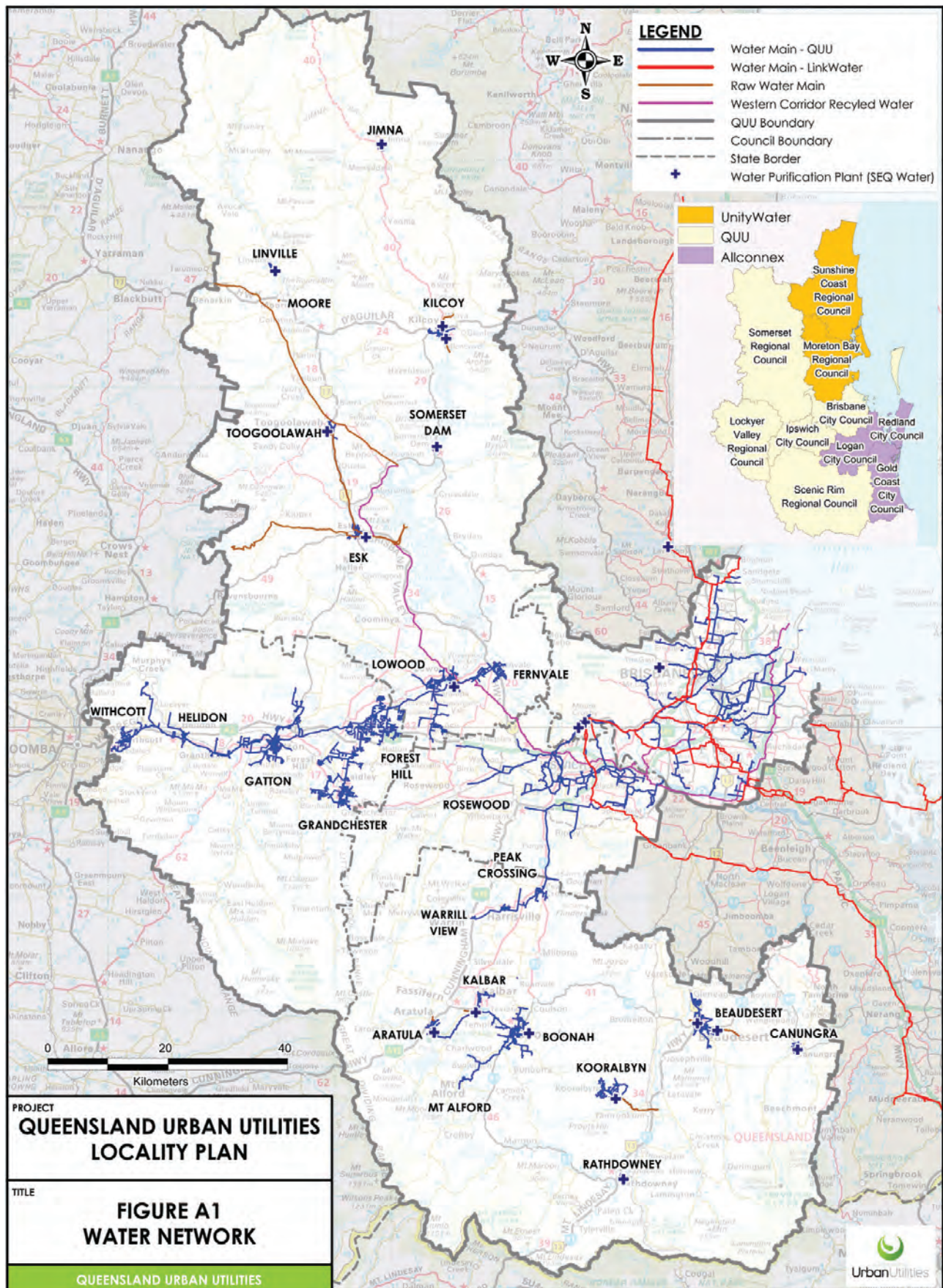


FIGURE A2 –
QUEENSLAND URBAN UTILITIES WASTEWATER NETWORK

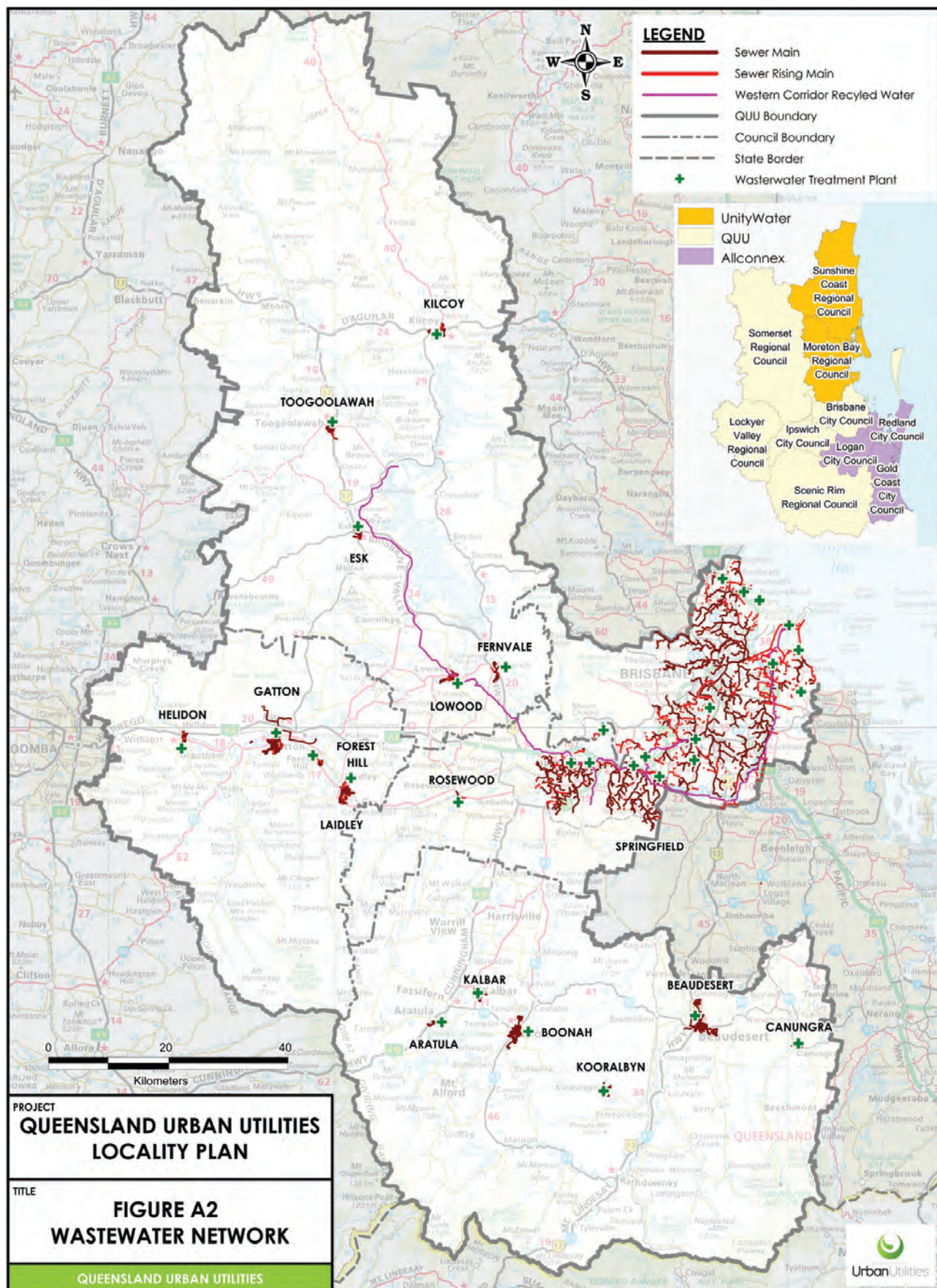


FIGURE A3 –
BRISBANE WATER NETWORK



FIGURE A4 –
BRISBANE WASTEWATER NETWORK

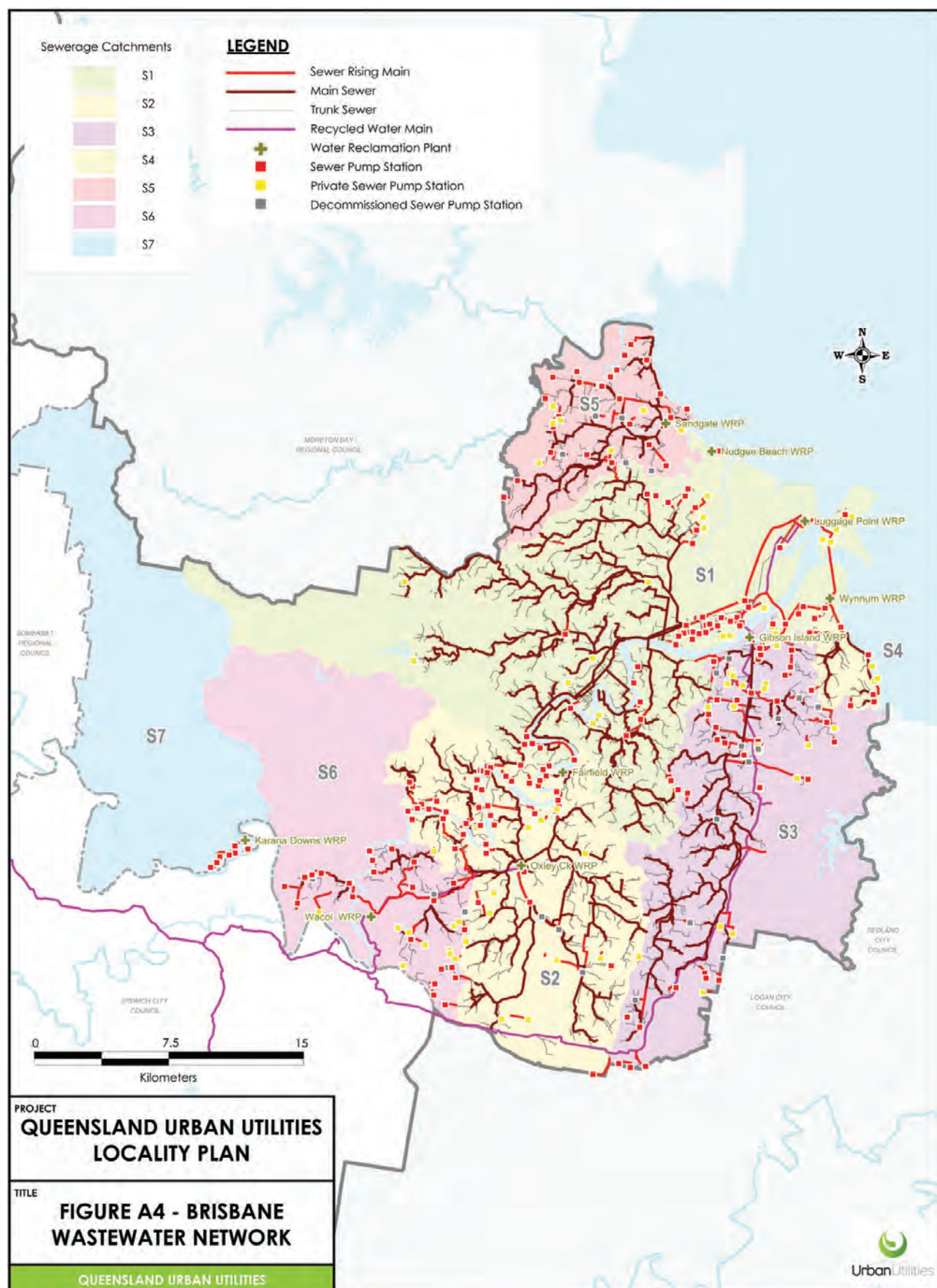


FIGURE A5 –
BRISBANE PROPOSED WATER INFRASTRUCTURE

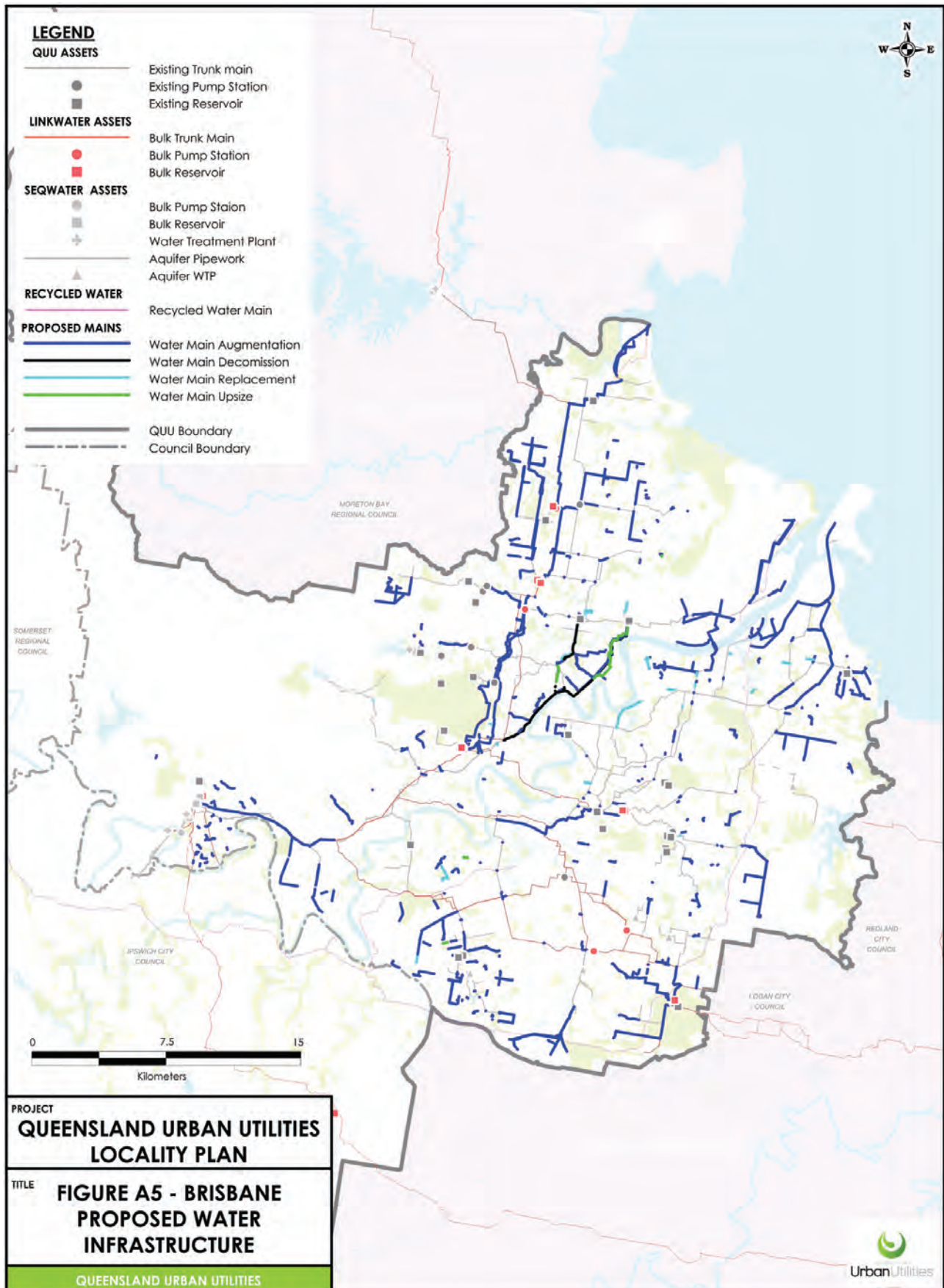


FIGURE A6 –
BRISBANE PROPOSED WASTEWATER INFRASTRUCTURE

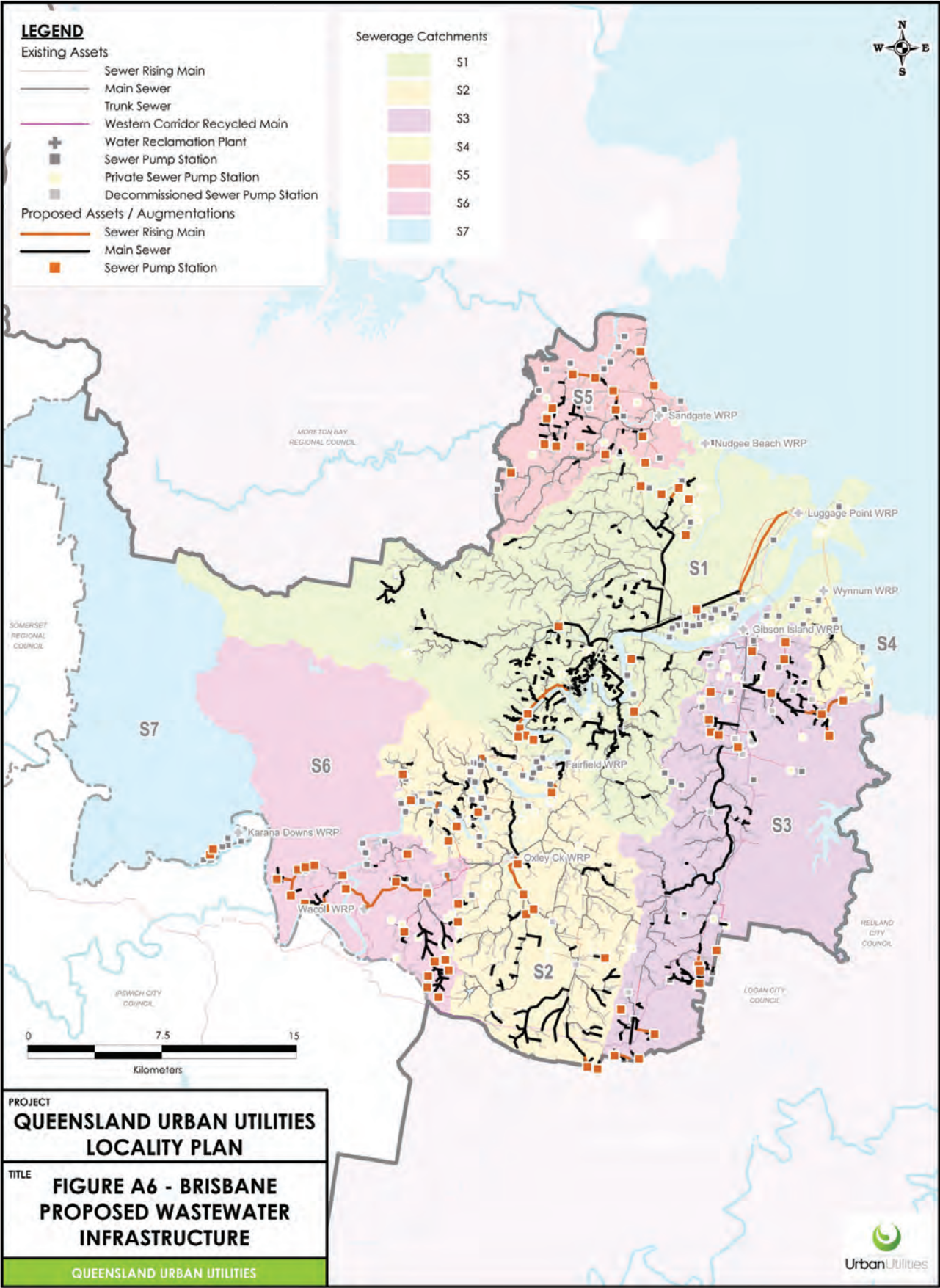


FIGURE A7 –
IPSWICH WATER NETWORK

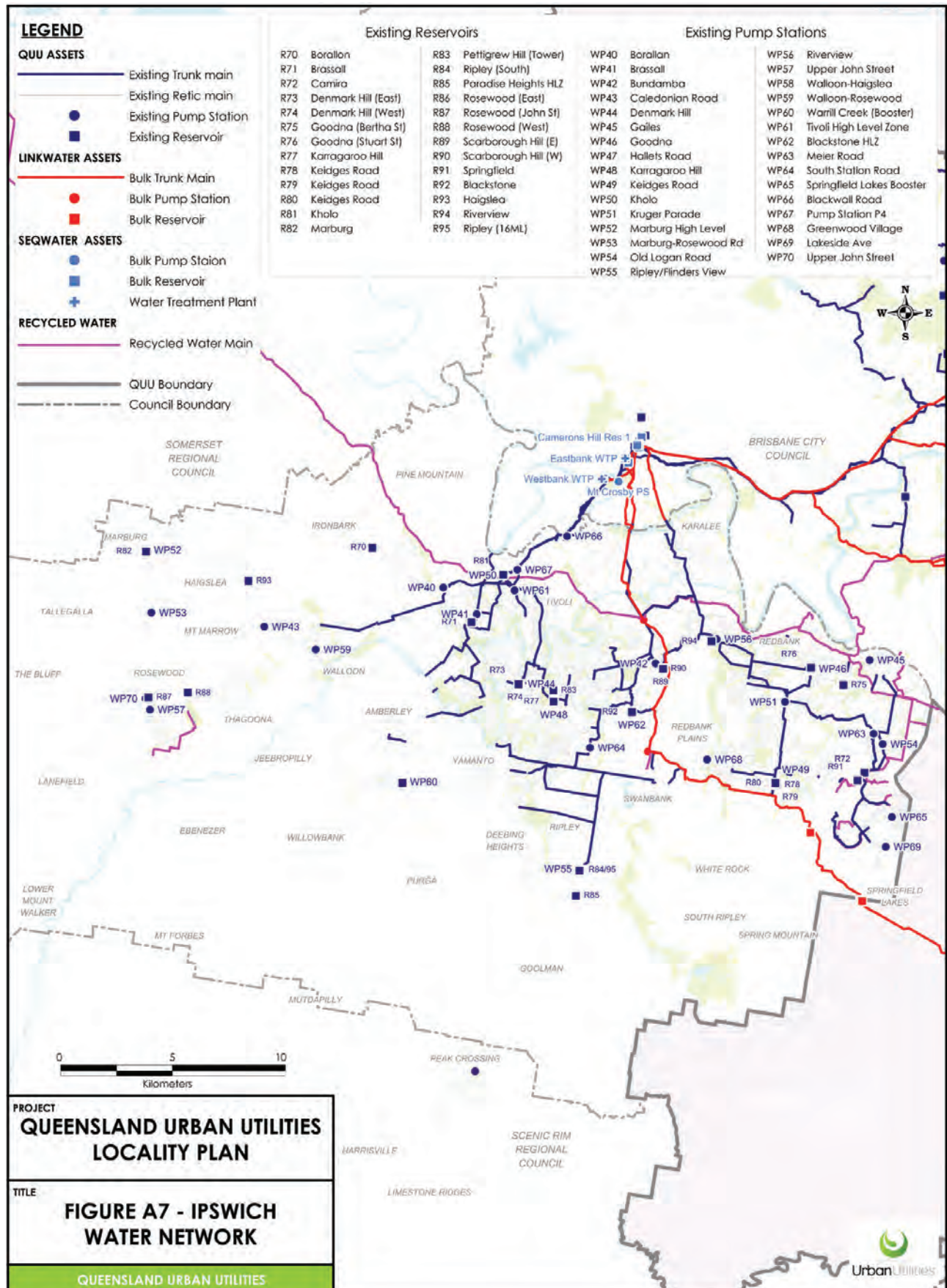


FIGURE A8 –
IPSWICH WASTEWATER NETWORK

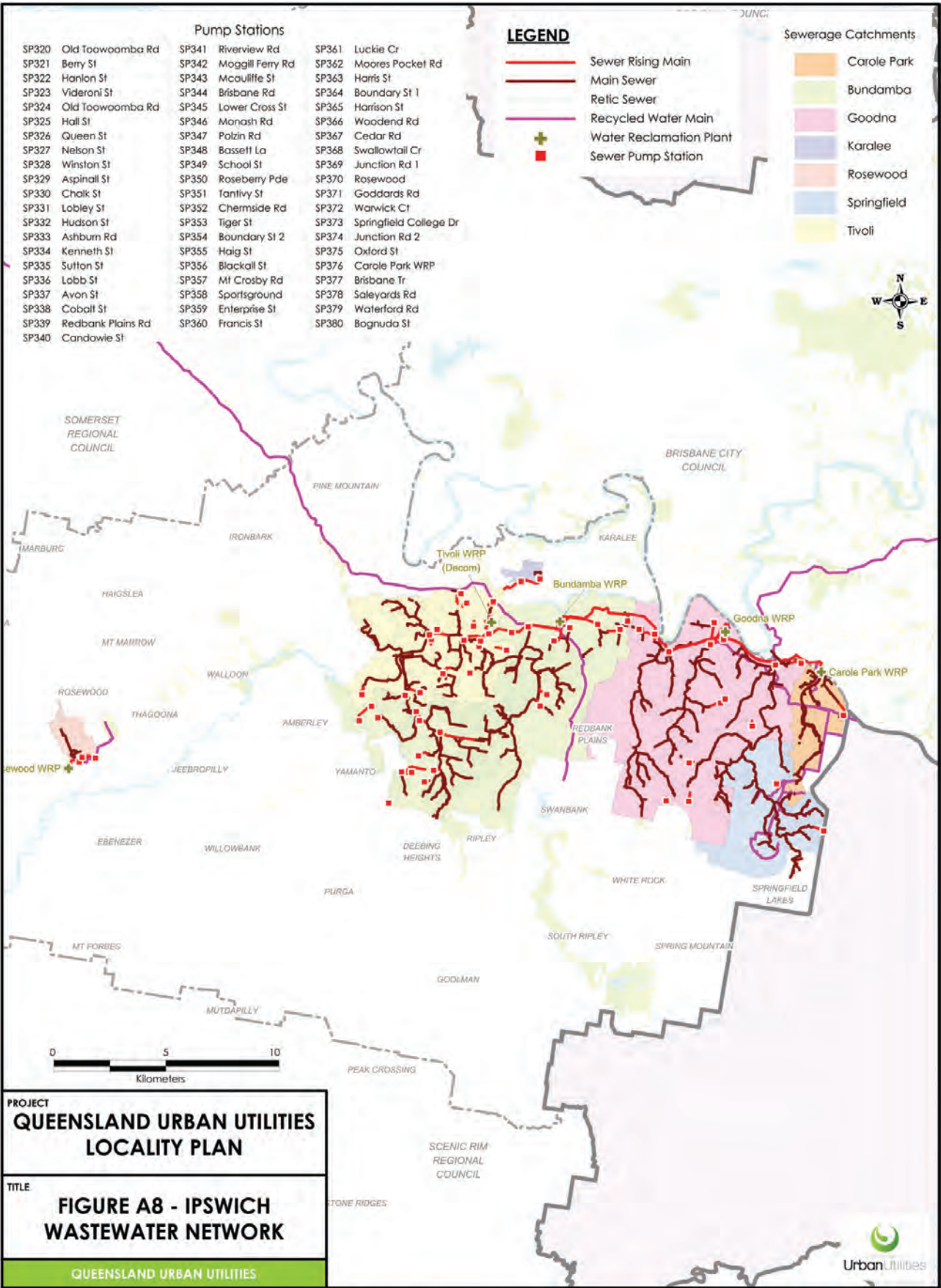


FIGURE A9 –
IPSWICH PROPOSED WATER INFRASTRUCTURE

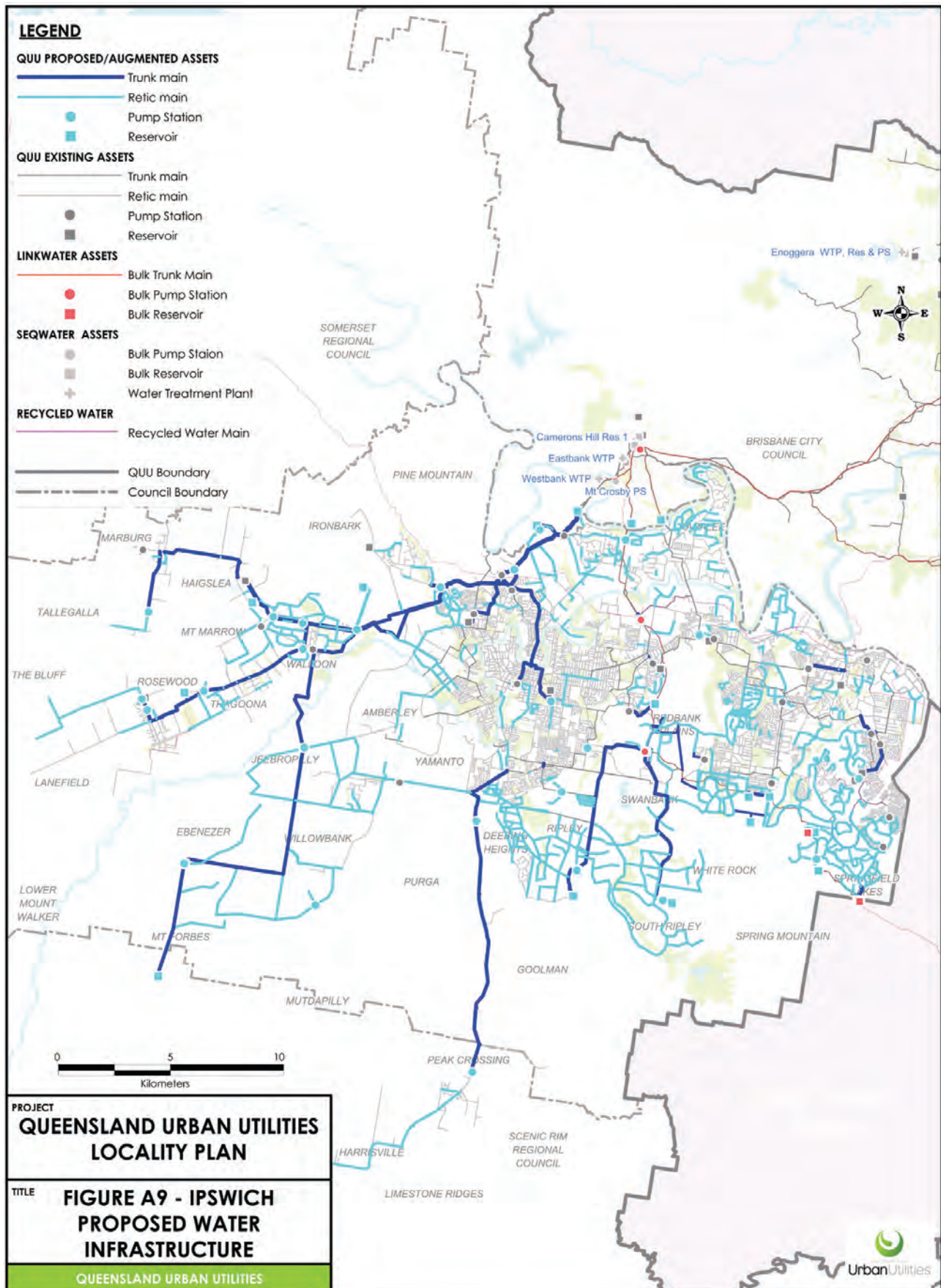


FIGURE A10 –
IPSWICH PROPOSED WASTEWATER INFRASTRUCTURE

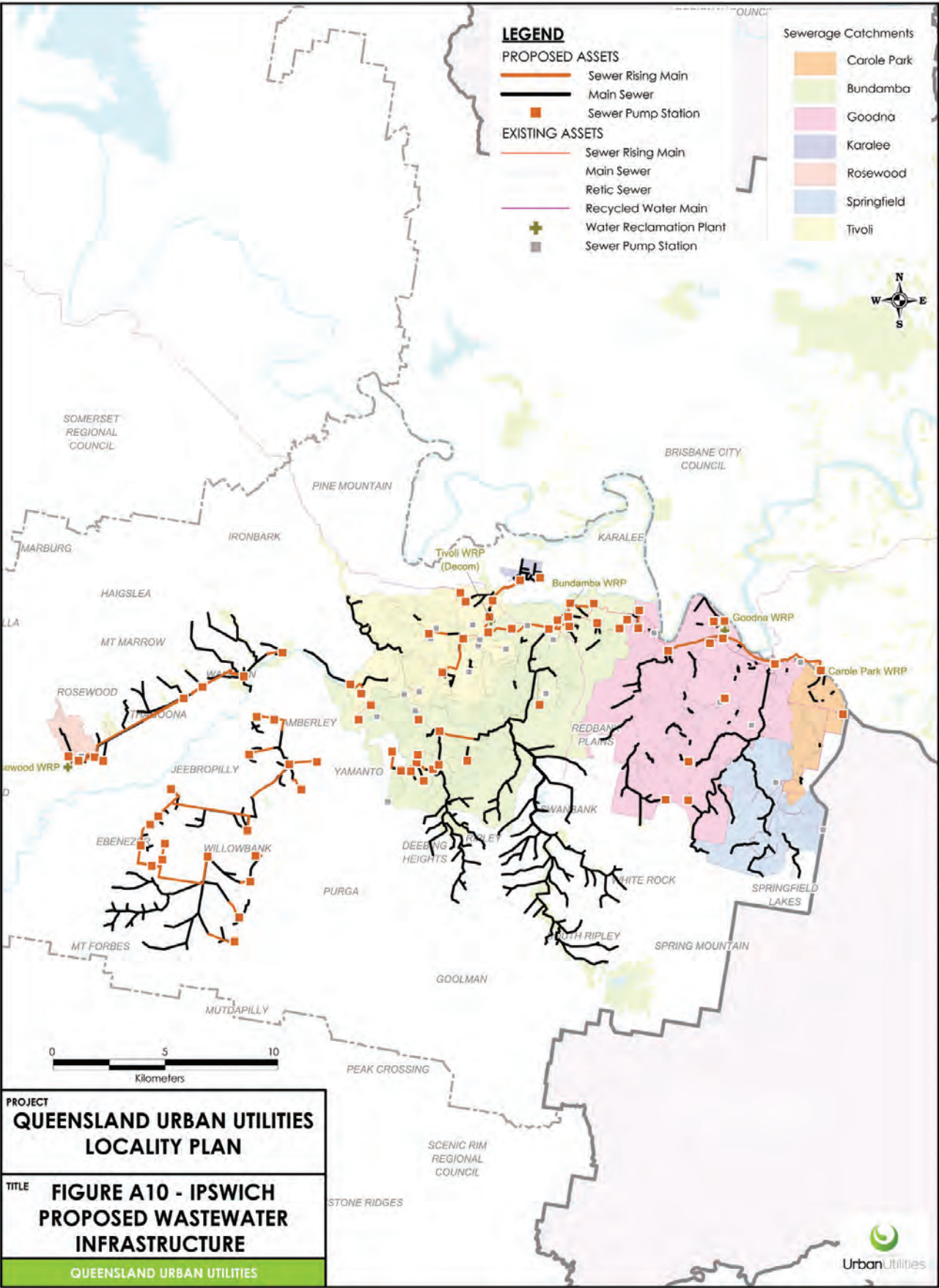


FIGURE A11 –
LOCKYER VALLEY WATER NETWORK

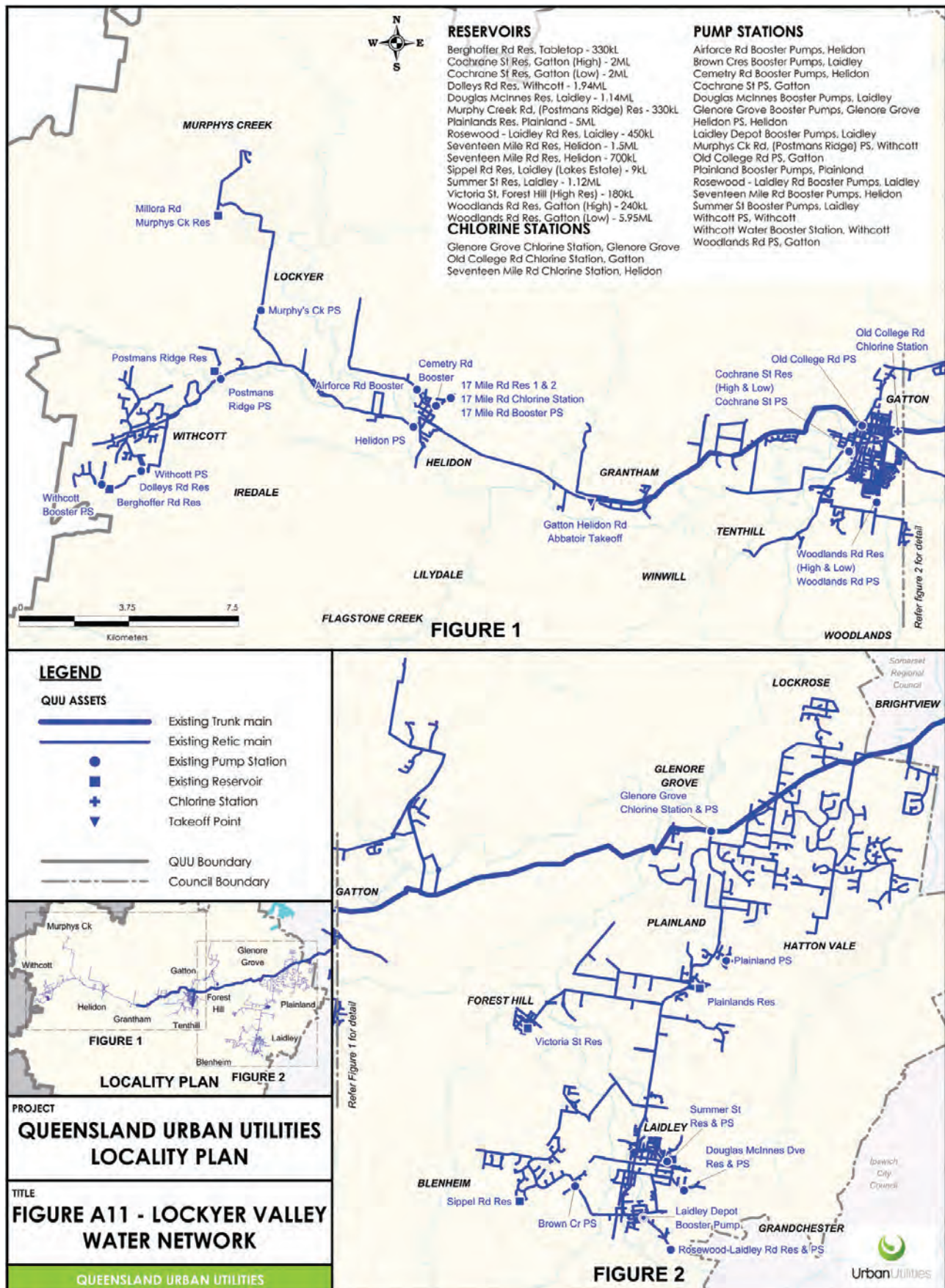


FIGURE A12 –
 LOCKYER VALLEY WASTEWATER NETWORK

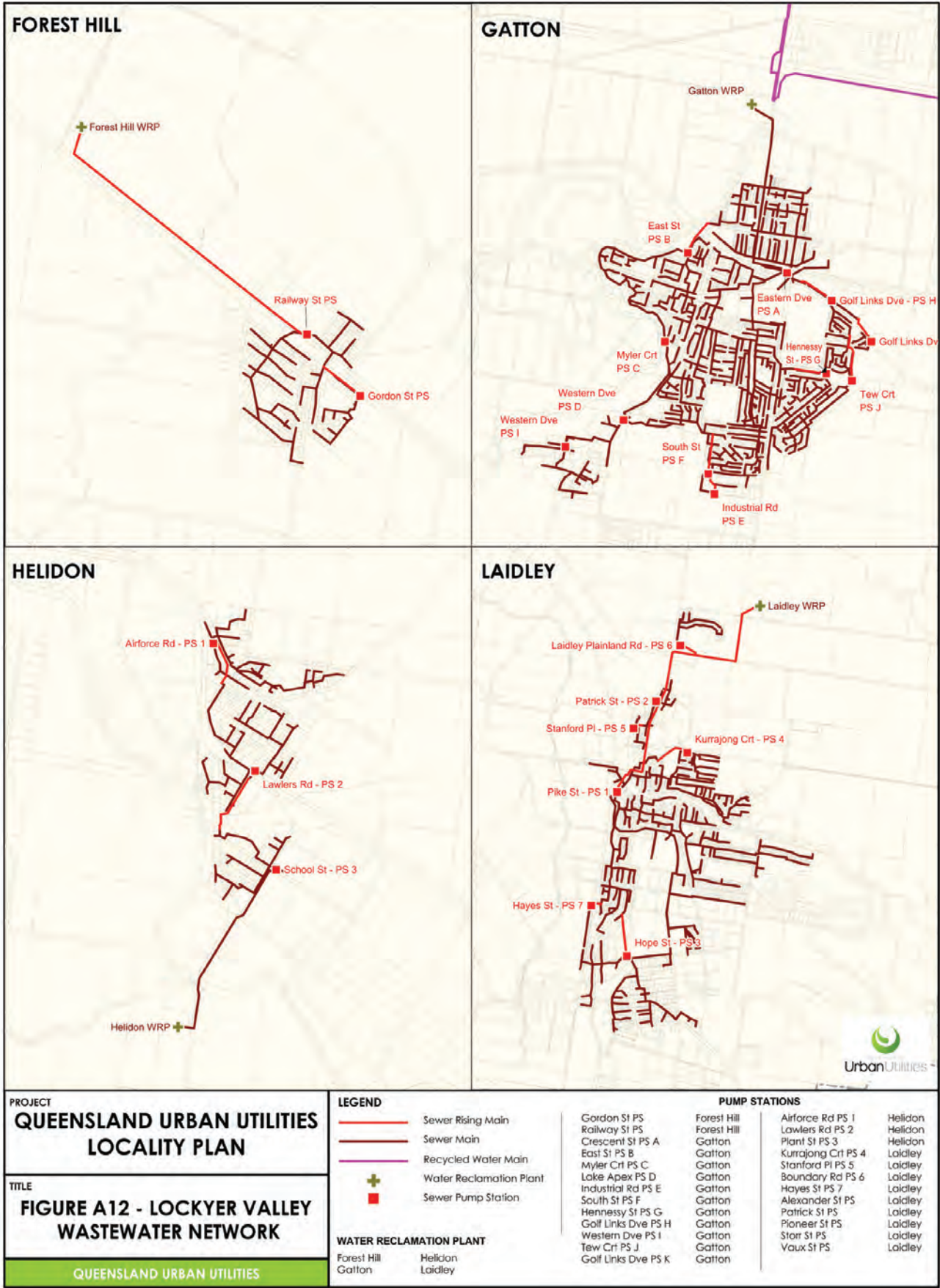


FIGURE A13 –
SCENIC RIM WATER NETWORK

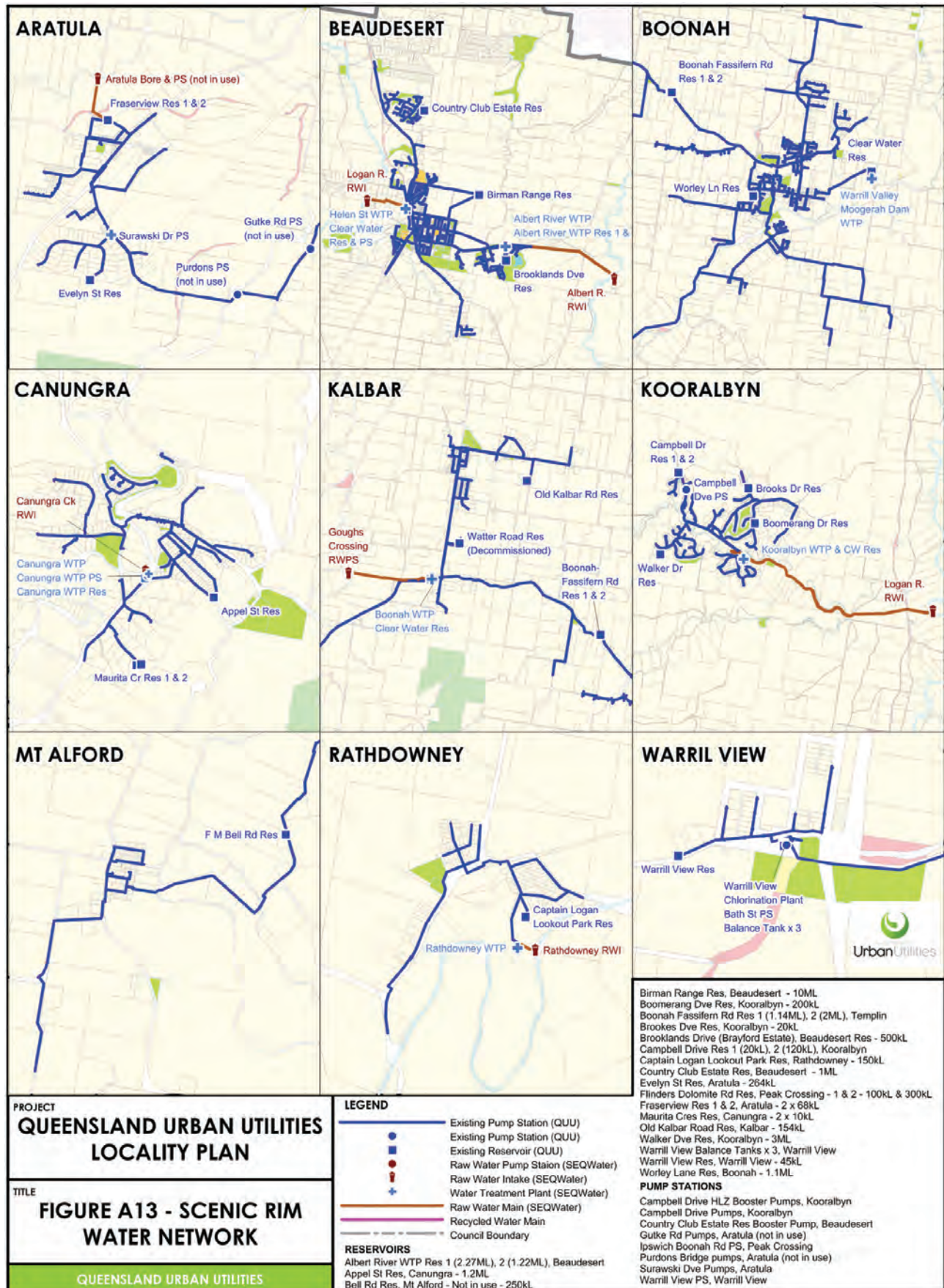


FIGURE A14 –
 SCENIC RIM WASTEWATER NETWORK

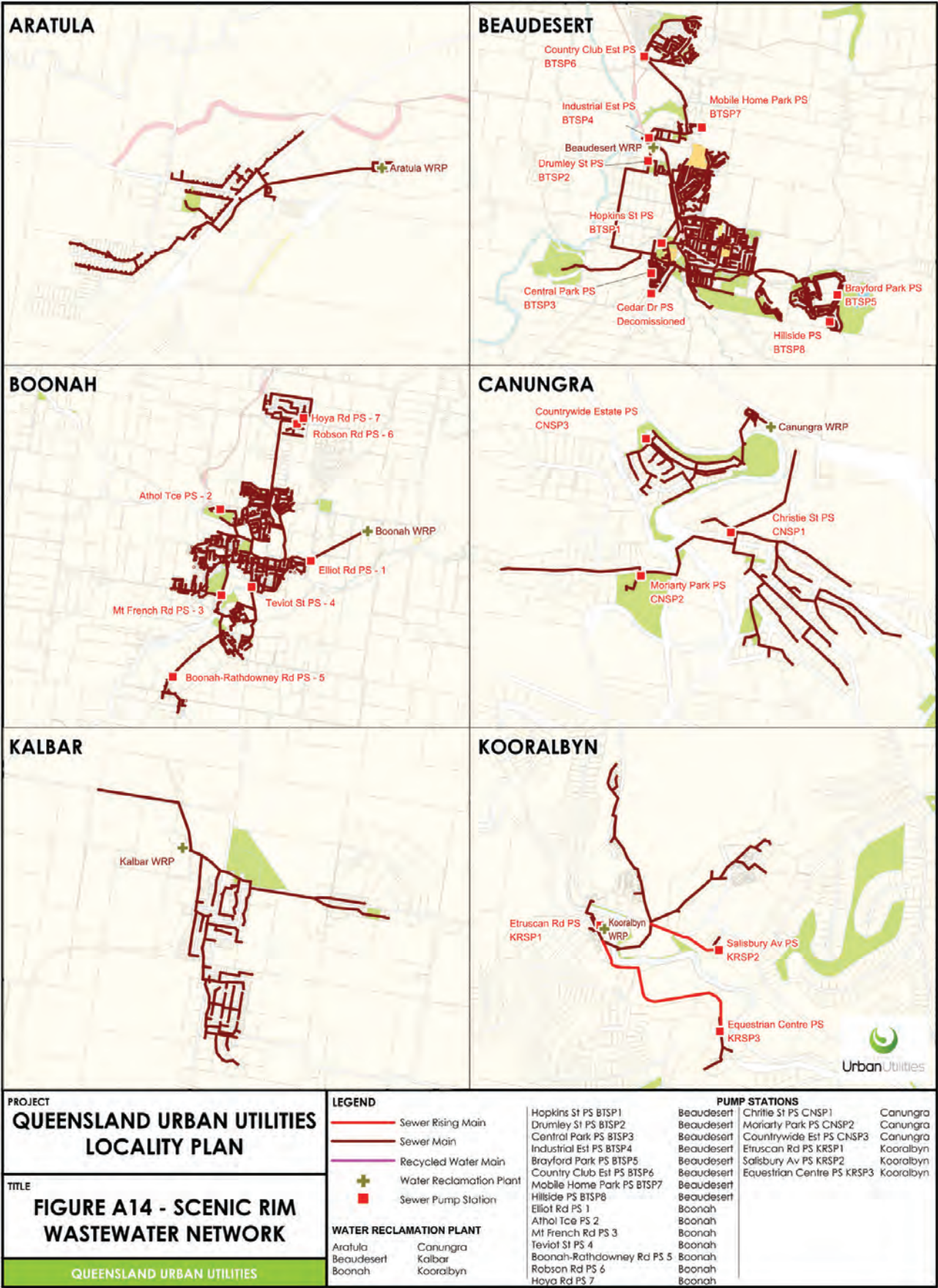


FIGURE A15 –
SOMERSET WATER NETWORK

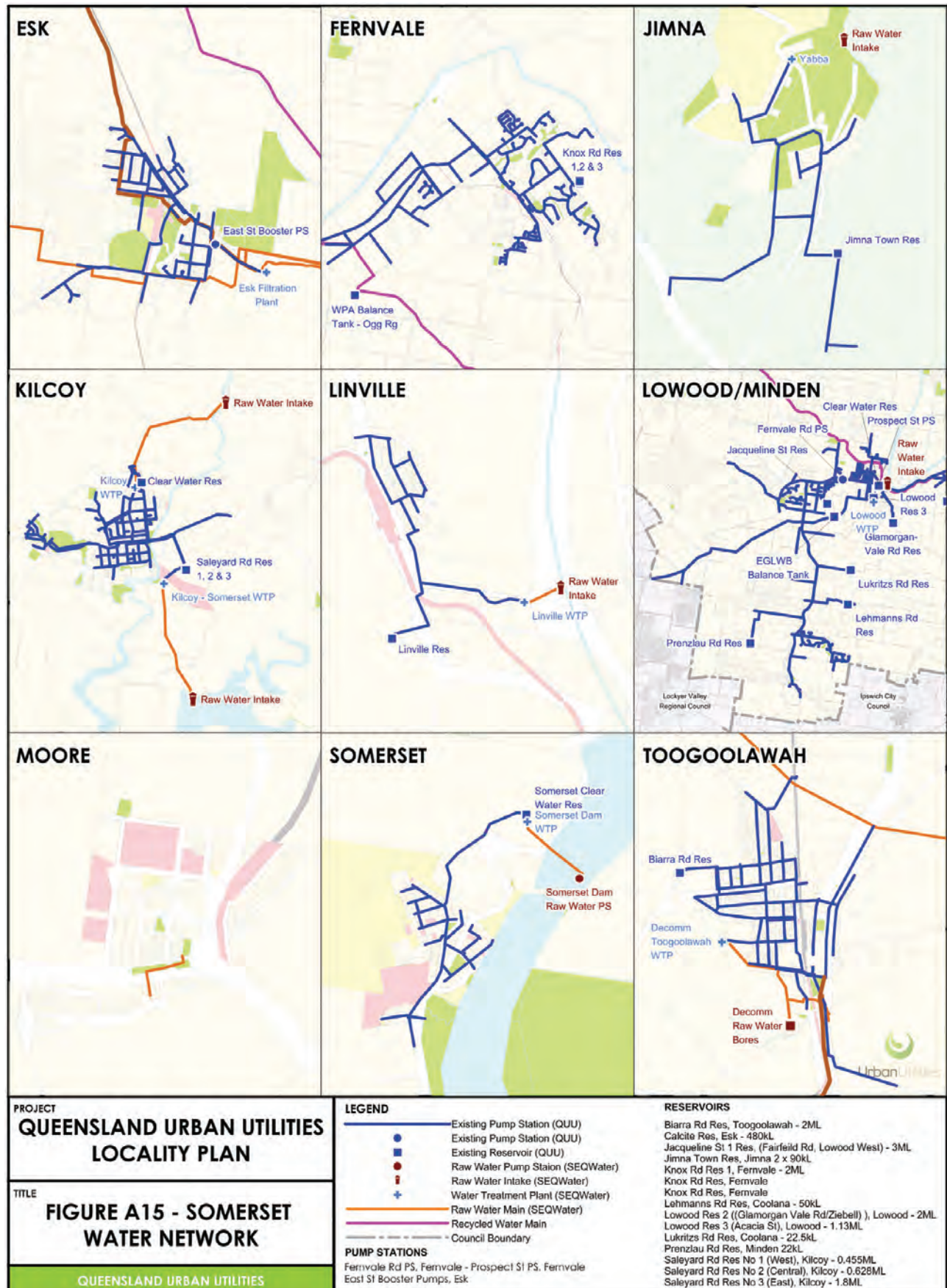


FIGURE A16 –
SOMERSET WASTEWATER NETWORK

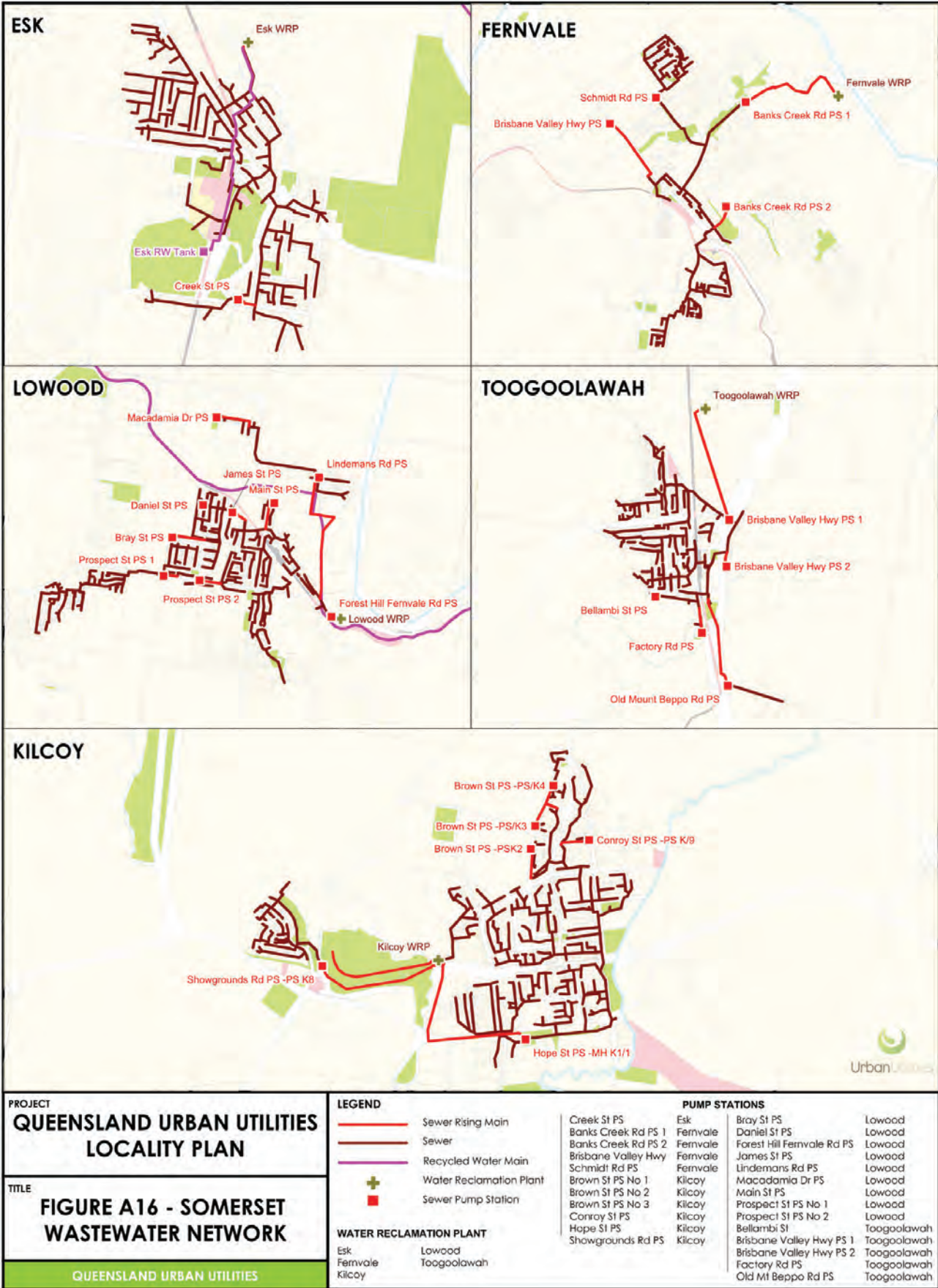


FIGURE A17 –
WATER SERVICE AREAS

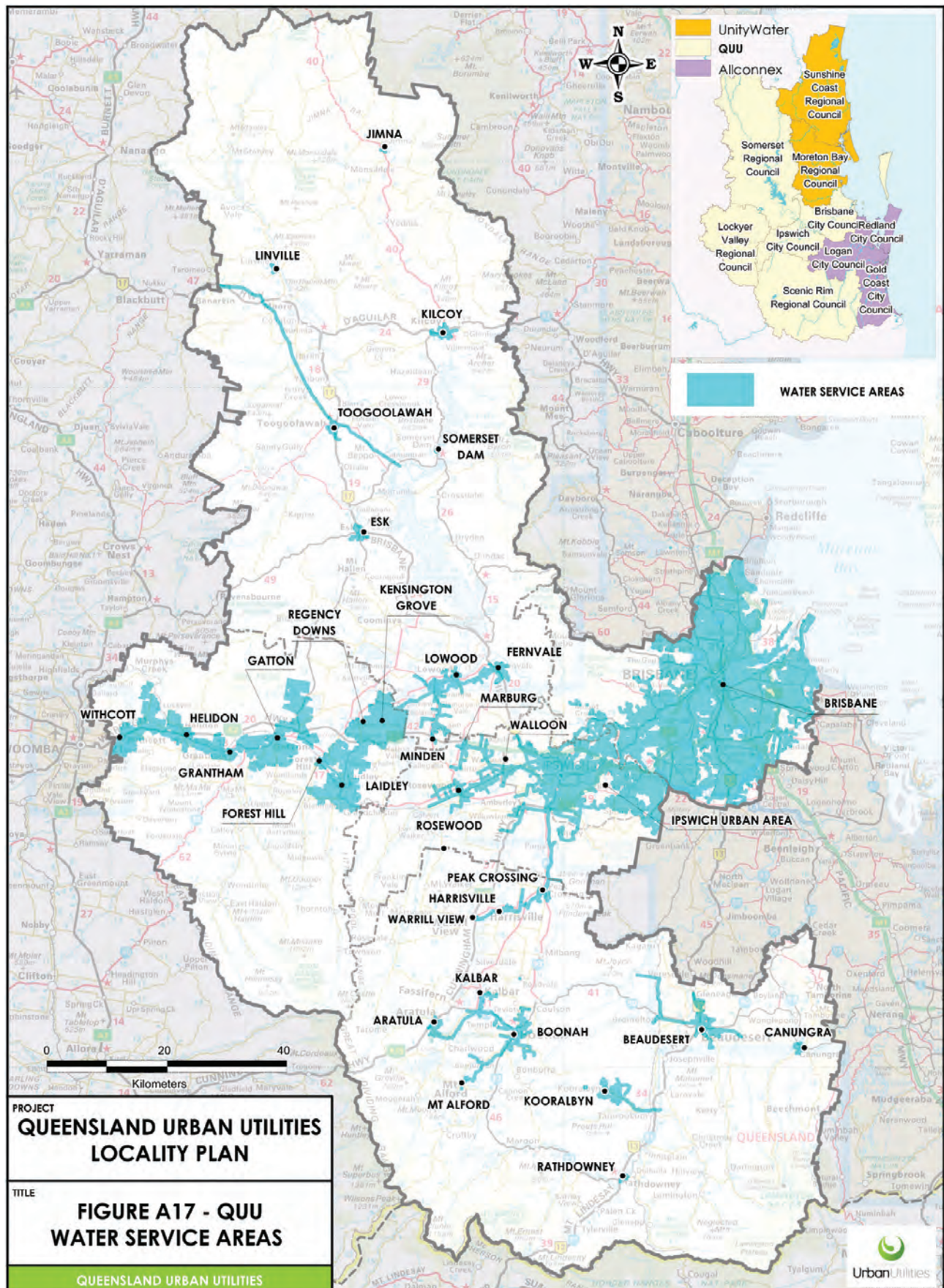
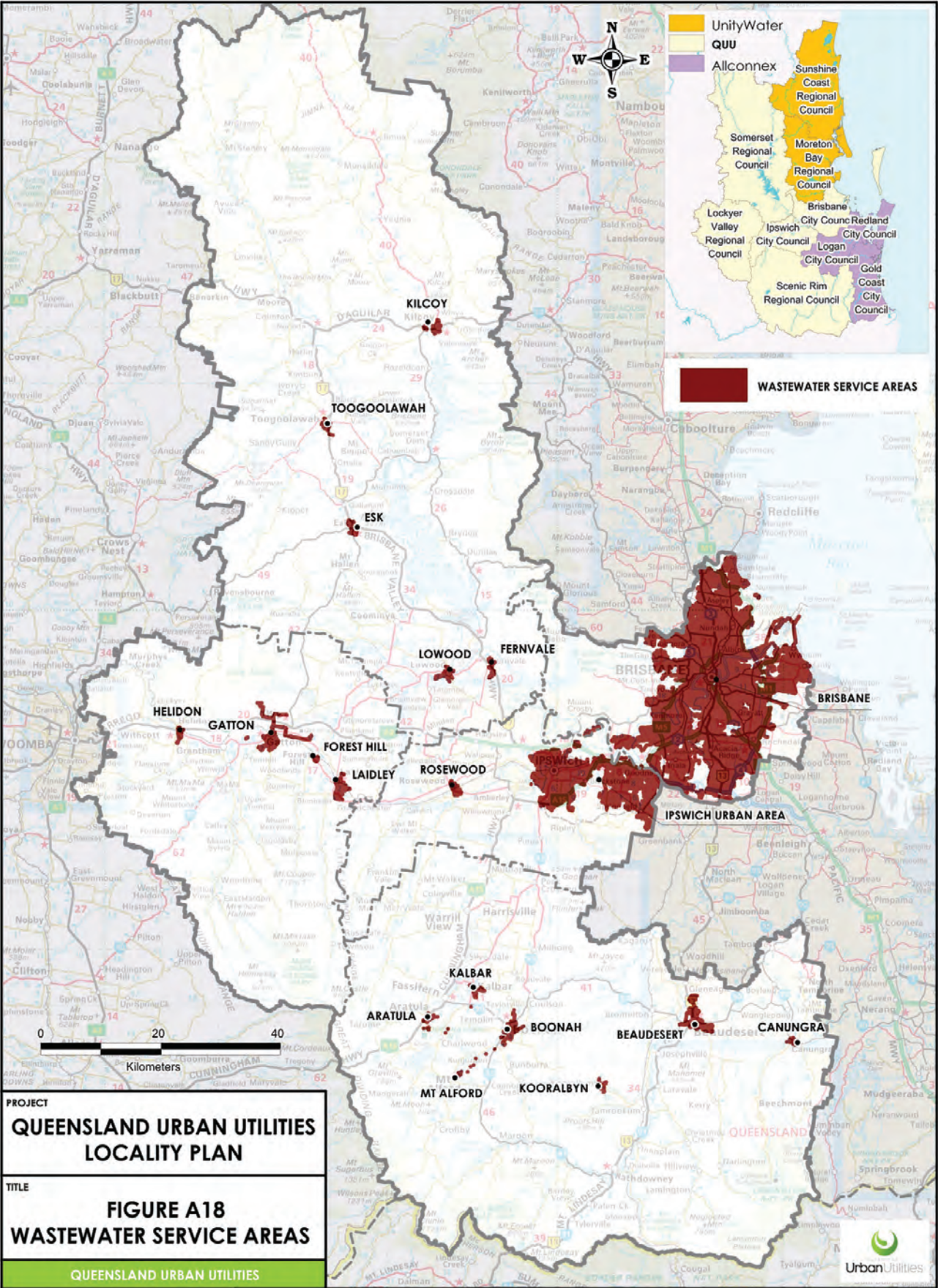


FIGURE A18 –
WASTEWATER SERVICE AREAS



APPENDIX B

SUMMARY OF PROPOSED INVESTMENT

Appendix B summarises all proposed water and wastewater investment projects as of 1 July 2011.

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TABLE BI

Proposed investment – Brisbane (as of 1 July 2011)

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Water network							
Aspley trunk main augmentation – Ellison Road to Hamilton Road	2.9	-	-	-	1.2	1.7	-
Aspley trunk main augmentation – Marchant Park to Zillmere Road	3.7	-	-	-	1.2	2.4	-
Douglas Street to Gloucester Street Augmentation	2.0	-	-	-	-	0.4	1.6
Lascelles Street, North Street and Greenwood Street augmentation	2.6	-	-	-	-	0.5	2.1
Bartleys Hill and Eildon Hill Reservoirs inlet improvements	5.8	0.4	-	-	-	-	-
Bartleys Hill/Wellers Hill zone connection including twin river crossing	26.4	-	-	3.7	13.1	9.6	-
Bartleys Hill water supply augmentation – Stage 3	2.3	-	-	-	2.3	-	-
Belmont Reservoir – Stage 1 (40ML) – Old Cleveland Road, Carindale	21.3	-	-	-	-	4.3	17.0
Ferny Grove water supply augmentation – Stage 2	4.0	-	-	1.4	2.5	-	-
Wellers Hill Reservoir/Weller Road, Tarragindi water main	5.3	-	-	-	-	1.1	4.2
Karawatha water supply augmentation	2.6	-	-	1.9	0.7	-	-
Milne Hill/Stafford water supply augmentation – Stage 2	4.0	-	-	-	4.0	-	-
Mount Crosby North water supply augmentation	1.7	-	0.7	1.0	-	-	-
New reservoir Mt Gravatt	8.8	-	-	-	-	1.8	7.1
Pritchard Street, Lytton	6.8	-	-	-	-	1.4	5.5
Sparkes Hill water supply augmentation	1.5	-	-	1.5	-	-	-
Water Main – distribution shared	4.5	-	-	-	-	0.9	3.6
Wellers Hill water supply augmentation – Stages 2 to 4	24.6	-	-	-	-	4.9	19.6
Ann Street to Bartleys Hill trunk main replacement	25.1	-	2.0	5.4	7.8	2.0	7.9
Paringa Road/Queensport Road 535mm trunk water main supply security	2.0	-	-	1.2	0.8	-	-
Wastewater network							
Woolloongabba sewer catchment augmentation	51.2	5.5	28.2	5.0	-	-	-
Bulimba Creek trunk sewer upgrade – Padstow Road to Coora Street	51.7	22.3	10.7	-	-	-	-
Auchenflower branch sewer upgrade	8.7	5.5	-	-	-	-	-
Toowong sewers upgrade	5.4	5.0	-	-	-	-	-
Pioneer Cres pump station bypass	1.7	0.7	1.0	-	-	-	-
Fairfield Branch and Yeronga sewer branch line No. 2 augmentation	3.6	1.9	-	-	-	-	-
Ashridge Road pump station upgrade	1.1	0.5	0.6	-	-	-	-
Sanananda Street pump station upgrade – Stage 1	1.9	0.6	-	-	-	-	-
Beams Road No. 1 pump station bypass	1.8	1.7	-	-	-	-	-
Breakfast Creek trunk sewer augmentation	44.1	-	-	6.0	18.0	20.1	-

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Riverside Drive, West End sewer upgrade – Phase I	14.1	-	-	2.0	12.1	-	-
Bulimba Creek trunk sewer upgrade – Wecker Road to Old Cleveland Road	51.0	-	4.9	19.8	26.3	-	-
Southbank sewerage river crossing upgrade	16.8	-	-	4.8	12.0	-	-
Minor Sewer augmentation program – master plans	32.3	-	-	4.2	4.2	4.2	19.6
Archerfield Road pumping station augmentation	8.2	-	3.1	5.1	-	-	-
Perrin Creek sewer upgrade – Taylor Street to Thynne Road	12.7	-	5.1	7.5	-	-	-
Water and Wickham Streets sewer upgrade	6.6	-	-	2.6	4.0	-	-
Wakerley sewerage catchment service sewer	13.6	-	-	1.7	11.9	-	-
Archerfield Road pump station decommissioning	0.8	-	0.8	-	-	-	-
St George Street pump station bypass	0.6	-	-	0.6	-	-	-
Lagoon Crescent pump station upgrade	1.9	-	0.4	1.4	-	-	-
Coopers Plains to Sunnybank sub main augmentation	3.2	-	-	3.2	-	-	-
South Kedron branch sewer upgrade	11.1	-	-	2.6	8.5	-	-
Sylvan Road (Bayliss Street to Coronation Drive) sewer upgrade	1.3	-	-	1.3	-	-	-
Banyo sub main augmentation	5.4	-	-	1.3	4.1	-	-
Virginia branch sewer augmentation	42.3	-	-	-	15.9	16.0	10.5
Corinda-Chelmer branch sewer upgrade	54.1	-	-	-	9.6	30.1	14.4
Wynnum main sewer upgrade (Wondall Road to Tingalpa Street)	3.7	-	-	-	3.7	-	-
South Kedron branch sewer upgrade	3.3	-	-	-	-	0.7	2.7
Sandy Creek sub main augmentation	4.7	-	-	-	-	0.9	3.8
Astor Terrace sewer upgrade	1.3	-	-	-	-	0.3	1.0
Sanananda Street pump station upgrade – Stage 2 (Oxley RM Duplication)	10.1	-	-	-	-	2.0	8.1
Woolloongabba sewer catchment rehabilitation	8.7	-	-	1.1	7.6	-	-
Bulimba Creek trunk sewer rehabilitation	6.8	-	-	1.1	5.8	-	-
SI main sewer rehabilitation – Eagle Farm pump station to James Street	31.7	-	4.1	10.2	10.2	7.2	-
Wastewater treatment							
Oxley Creek WWTP – primary digesters environmental improvements	2.8	1.5	1.2	-	-	-	-
Gibson Island WWTP – phosphorus reduction (potential licence compliance)	2.1	-	-	-	2.1	-	-
Gibson Island WWTP – sludge de-watering enhancement	3.8	3.5	-	-	-	-	-
Luggage Point WWTP – odour control – Stage I	8.5	-	1.5	6.7	-	-	-
Wynnum WWTP – demolition of redundant structures and site restoration	1.6	0.3	-	-	-	-	-
Wacol WWTP upgrade – regional sewerage scheme for Goodna and Wacol catchments Phase 2	91.0	-	-	-	20.4	70.5	-
Wacol WWTP upgrade – regional sewerage scheme for Goodna and Wacol catchments Phase 3	37.8	-	-	-	-	-	37.8

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Oxley Creek WWTP – outfall upgrade	15.5	-	-	7.8	7.8	-	-
Oxley Creek WWTP – Stage 6 capacity upgrade	36.2	-	-	-	7.2	14.5	14.5
Oxley Creek WWTP – sludge de-watering upgrade	0.4	-	-	-	-	0.4	-
Luggage Point WWTP rotary sludge thickener	9.3	-	4.1	5.2	-	-	-
Luggage Point WWTP DAF* upgrade	8.5	-	-	-	1.0	3.2	4.2
Luggage Point WWTP RAS† upgrade	3.6	-	-	3.6	-	-	-
Karana Downs WWTP diversion to Bundamba WWTP	10.2	-	-	-	5.1	5.1	-
Luggage Point WWTP – cogeneration plant replacement	7.0	-	7.0	-	-	-	-
Luggage Point WWTP wet weather relief overflow	4.5	1.7	-	-	-	-	-
Luggage Point WWTP grit dredgers replacement	1.8	1.3	-	-	-	-	-
Nudgee Beach WWTP replacement	7.8	0.7	-	-	-	-	-
Wacol WWTP inlet screens replacement	2.9	1.5	-	-	-	-	-
Wacol WWTP programmable controller replacement	1.4	0.3	-	-	-	-	-
Wacol WWTP UV system replacement	1.0	0.7	-	-	-	-	-
Luggage Point WWTP primary settling tanks No. 1 and No. 2 refurbishment	1.1	0.8	-	-	-	-	-
Recycled water							
Australia TradeCoast northwest reuse mains augmentation	4.1	-	-	-	1.6	2.5	-
Australia TradeCoast south reuse mains augmentation	11.2	-	-	-	2.4	8.4	0.3
Australia TradeCoast northeast reuse mains augmentation	2.1	-	-	2.1	-	-	-
Australia TradeCoast northwest reuse treatment augmentation	1.2	-	-	1.2	-	-	-
Australia TradeCoast south reuse mains augmentation	0.3	-	-	-	-	0.1	0.3

*Dissolved air flotation.

†Return activated sludge.

TABLE B2

Proposed investment – Ipswich (as of 1 July 2011)

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Water network							
Bulk Water Meters Implementation program	2.4	0.3	-	-	1.1	0.9	-
Springfield West Reservoir	3.1	0.2	-	-	-	-	-
Land purchase for Redbank Plains High-Level (HL) Reservoir	0.9	0.6	-	-	-	-	-
Borallon pump station to Heritage Drive, Brassall water main	0.7	0.3	-	-	-	-	-
Springfield High-Level Zone (HLZ) Elevated Reservoir implementation	2.0	-	1.9	-	-	-	-
Land purchase for two Ripley Valley reservoir sites	1.9	-	-	1.9	-	-	-
Redbank Plains and Keidges HLZ mains augmentation	13.5	-	-	-	-	0.2	13.3
Fischer Road (Ripley) water trunk main implementation	2.7	-	-	-	-	1.9	0.8
Karrabin-Rosewood Road and Queen Street, Walloon (Elm to Haigslea-Amberley) water main	1.1	-	-	1.1	-	-	-
Karrabin-Rosewood Road, Thagoona (Caledonian to Langdon) water main	1.5	-	-	-	1.5	-	-
Springfield Parkway and Old Logan Road, Springfield (Camira Reservoir to Karnak) water main	2.7	-	-	-	-	2.7	-
Rosewood Reservoir augmentation	0.8	-	-	-	0.8	-	-
Ripley supply main, Wensley Road, Ripley	2.9	-	2.0	0.9	-	-	-
Rosewood Water Zone master project	4.6	0.2	0.5	0.8	1.3	1.7	-
Chuwar Reservoir Water Zone Phase 1 master project	8.1	-	0.5	-	2.8	4.8	-
Chuwar Reservoir Water Zone Phase 2 master project	4.2	-	-	-	-	0.6	3.6
Walloon Reservoir Water Zone master project	8.2	-	-	-	4.2	4.0	-
Rosewood HLZ pump station (bonded works)	0.3	0.3	-	-	-	-	-
Wastewater network							
Mellor Place trunk sewer upgrade – Stage 2	1.2	1.2	-	-	-	-	-
Rosewood sewer catchment augmentation	3.1	0.6	2.1	-	-	-	-
Collingwood/Riverview sewer augmentation	4.5	-	-	3.3	1.2	-	-
Bundamba Creek trunk gravity sewer infrastructure	143.1	-	-	-	-	5.1	138
Sewer infrastructure – sections of Warwick Road and Berry Street	1.2	-	-	0.3	0.9	-	-
Woogaroo Creek (Goodna) trunk sewer augmentation	83.1	52.0	10.7	0.3	-	-	-
Deebling Creek sewer trunk main augmentation – Stage 1	3.5	2.9	-	-	-	-	-
Bundamba Creek trunk gravity main implementation – Stage 1a and 1b	21.8	9.8	9.9	0.1	-	-	-

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Mellor Place trunk sewer upgrade – Stage 1	1.1	0.7	-	-	-	-	-
Lobley Street (Ipswich) sewerage pump station augmentation	1.3	1.2	-	-	-	-	-
New sewer pump station – Brisbane Terrace	0.9	0.1	-	-	-	-	-
Sewer main, The Terrace, Pelican Street	2.1	-	1.5	0.6	-	-	-
Brisbane Road, River Road, Brisbane Terrace, Redbank rising sewer	4.5	-	-	-	3.1	1.3	-
Redbank Plains Road, Tindal Street, Six Mile Creek, Redbank Plains sewer main	1.2	-	-	1.2	-	-	-
Deebing Creek sewer trunk main augmentation – Stage 2	12.3	-	-	5.1	7.2	-	-
Trunk sewers flow monitoring and rainfall gauging implementation	1.1	-	0.9	-	-	-	-
Old Toowoomba Road sewerage pump station upgrade (SP01)	3.7	2.4	-	-	-	-	-
McAuliffe Street sewerage pump station upgrade (SP33)	3.0	1.7	0.2	-	-	-	-
Six Mile Creek sewerage pump station upgrade (SP34)	3.2	2.2	0.1	-	-	-	-
Wastewater treatment							
Goodna WWTP upgrade Stage 4A – regional sewerage scheme for Goodna and Wacol catchments Phase 1	130.1	68.4	15.4	0.3	-	-	-
Rosewood WWTP upgrade – Stage 2a	6.9	2.7	0.3	-	-	-	-
Bundamba WWTP upgrade – Stage 5a	155.2	-	-	2.1	40.5	106.1	-
Carole Park WWC pump station upgrade	1.1	0.9	-	-	-	-	-
Rosewood WWTP upgrade – Stage 2b	44.5	-	-	-	-	3.6	40.9

TABLE B3

Proposed investment – Lockyer Valley (as of 1 July 2011)

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Water network							
Placid Hills Reservoir	0.8	-	0.8	-	-	-	-
Woodlands Rise Reservoir	0.8	-	-	-	0.8	-	-
Laidley Reservoir augmentation	0.8	-	0.8	-	-	-	-
Wastewater network							
Lockyer Regional WWTP upgrades	26.4	0.8	8.0	17.3	-	-	-
Western Regional WWTP upgrade	1.0	-	1.0	-	-	-	-
Eastern Regional WWTP upgrade – Stage 2	5.1	-	-	-	-	2.0	3.1
Western Regional WWTP upgrade – Stage 2	1.2	-	-	-	-	0.6	0.6
WWTP Lagoons enhancements	2.5	2.5	-	-	-	-	-

TABLE B4

Proposed investment – Scenic Rim (as of 1 July 2011)

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Water network							
Reservoir site Beaudesert South – 2ML	1.5	-	-	1.5	-	-	-
Tubber Street to Kingsley Drive trunk main – Stage A	0.5	0.4	-	-	-	-	-
Canungra trunk water main from new WTP at off-stream storage to town	1.6	-	0.2	1.5	-	-	-
Water trunk main from Helen Street WTP to proposed reservoir site	2.6	-	-	-	-	2.6	-
Proposed reservoir outlet mains – Bromelton	2.1	-	-	-	-	2.1	-
Trunk water main infrastructure – Bromelton	3.2	-	-	-	-	3.2	-
Upgrade existing storage at Albert WTP Reservoir	1.6	-	-	-	1.6	-	-
Upgrade existing storage at Brayford HL Reservoir	0.9	-	-	-	0.9	-	-
Upgrade storage at Birnam Range Reservoir	1.5	-	-	-	1.5	-	-
Helen Street WTP to Birnam Range Reservoir	1.8	-	-	1.8	-	-	-
Area 6 – internal water trunk main creating ring main	1.2	-	-	1.2	-	-	-
Tullamore Reservoir (Beaudesert) implementation	0.5	-	0.5	-	-	-	-
Brookes Drive Reservoir (Kooralbyn) implementation	0.2	0.2	-	-	-	-	-
Rathdowney Reservoir	0.9	0.3	0.5	-	-	-	-
Wastewater network							
Hopkins Street wastewater pump station upgrade	0.9	0.8	-	-	-	-	-
Beaudesert WWTP sewerage catchment – 300mm diameter rising main (diversion)	2.3	-	-	-	2.3	-	-
Beaudesert WWTP sewerage catchment – 750mm diameter gravity sewer	2.5	-	-	-	2.5	-	-
Beaudesert WWTP sewerage catchment – 375mm diameter gravity sewer	1.0	-	-	-	1.0	-	-
Bromelton Beaudesert sewerage infrastructure scheme	5.1	-	-	-	-	5.1	-
Hoya Road (Boonah) sewerage system improvement	0.7	0.6	-	-	-	-	-
Wastewater treatment							
Canungra WWTP upgrade	8.0	3.3	-	-	-	-	-
Bromelton WWTP land purchase	4.6	-	4.6	-	-	-	-
Bromelton WWTP implementation	34.2	-	-	6.0	10.2	-	-
Kooralbyn WWTP augmentation – land purchase	0.1	-	-	-	-	0.1	-
Beaudesert WWTP upgrade	5.5	-	5.1	-	-	-	-
Aratula WWTP upgrade	0.8	-	0.5	-	-	-	-
WWTP lagoons enhancements	2.1	2.1	-	-	-	-	-

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Recycled water							
Recycled water Stage 1b Beaudesert	0.5	0.4	-	-	-	-	-
Bromelton Central – recycled water plant augmentation – Stage 1	4.5	-	-	-	-	4.5	-

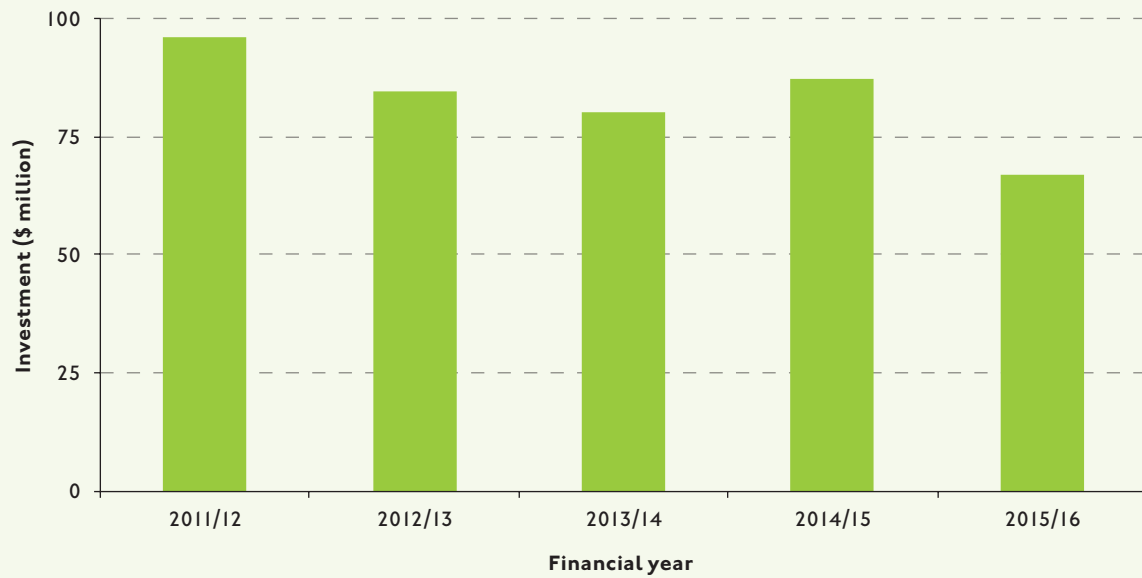
TABLE B5

Proposed investment – Somerset (as of 1 July 2011)

Project	Capital expenditure (\$ million)						
	Total	2011/12	2012/13	2013/14	2014/15	2015/16	Beyond 2015/16
Water network							
Lowood catchment upgrade (Eagle Rise development)	3.6	-	3.4	-	0.1	-	-
Vogler Road, Fernvale trunk gravity main	2.1	-	1.1	1.0	-	-	-
Kilcoy trunk gravity main upgrade	0.9	-	0.5	0.5	-	-	-
Wastewater network							
Fernvale WWTP implementation	39.4	2.7	22.8	13.4	-	-	-
Kilcoy WWTP – new	15.0	-	0.7	5.1	5.1	4.1	-
Kilcoy WWTP – land purchase	0.2	-	0.2	-	-	-	-

FIGURE B1

Summary of proposed investment – renewals programs (as of 1 July 2011)



APPENDIX C

SUMMARY OF CHARGES

Appendix C summarises detailed service and infrastructure charges for those areas where the charges are not presented in Chapter 8. The charges are sourced from our charging regimes as of 1 July 2011. Charges are presented in varying units for the individual areas due to varied planning assumptions and calculation methodology. All the charges are presented in 2011/12 dollars.

Definitions

Fire service connection – a separate connection to the water network used for fire protection systems. Access charges apply to this type of connection.

Pedestal – means a toilet.

Queensland Government bulk water charge – the cost of treated water that is supplied from the Queensland Government.

Sewerage access charge – a charge for the first pedestal for ongoing connection to Queensland Urban Utilities' network, for the removal of sewage from your home or business. If you have more than one, the first pedestal is included in the access charge.

Sewerage access charge (reduced access) –

Reduced access applies if the property allotment is a paved road used to access a number of adjoining properties and is exclusively for vehicle and pedestrian access, or a lot on a community title scheme and used for a car parking space, storage cupboard, storage unit, advertising hoarding or purposes of a like nature.

Tenement – represents a single residential detached dwelling.

Vacant land – land that does not contain buildings or structures and cannot be used for human habitation or occupation. This does not include land that is used for outdoor storage, assembly areas or rural activities such as cultivation or grazing.

Water access charge – a quarterly fixed charge to supply drinking water from Queensland Urban Utilities' network to your home or business. The water access charge may vary according to the type and size of connection.

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TABLE C1

Brisbane residential water service charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$1.79/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 255kL per annum)	\$0.67/kL
Tier 2 Consumption (first 256–310kL per annum)	\$0.71/kL
Tier 3 Consumption (in excess of 310kL)	\$1.26/kL
Water Access Charge	\$41.79/quarter

TABLE C2

Brisbane residential wastewater service charges (2011/12)

Water service charges	Charge
Sewerage Access Charge	\$118.98/quarter
Sewerage Access Charge – Reduced Access	\$44.28/quarter

TABLE C5

Brisbane commercial wastewater charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge†	\$118.98/quarter
Sewerage Access Charge – Reduced Access	\$44.28/quarter
Pedestal Charges (General)	
2–8 pedestals – (charge per pedestal)	\$126.45/quarter
9–12 pedestals – (charge per pedestal)	\$158.34/quarter
In excess of 12 pedestals – (charge per pedestal)	\$194.73/quarter
Pedestal Charges (Multi-residential properties – non community title schemes)	
2–8 pedestals – (charge per pedestal)	\$104.73/quarter
9–12 pedestals – (charge per pedestal)	\$131.37/quarter
In excess of 12 pedestals – (charge per pedestal)	\$161.82/quarter
Pedestal charges (retirement homes, hospitals, schools, kindergartens, community protection centres, churches, welfare homes (excluding land used for the purpose of universities or tertiary education) not-for-profit sporting and community organisations (excluding land used for a commercial purpose).	
2–8 pedestals – (charge per pedestal)	\$49.38/quarter
9–12 pedestals – (charge per pedestal)	\$61.65/quarter
In excess of 12 pedestals – (charge per pedestal)	\$76.02/quarter
Pedestal charges (Major sporting stadium) – (charge per pedestal)	\$126.45/quarter

† There is no charge for urinals

TABLE C3

Brisbane vacant land charges (2011/12)

Vacant land charges	Charge
Water Access Charge – Vacant Land	\$41.79/quarter

TABLE C4

Brisbane commercial water charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$1.79/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 200kL pa)	\$0.79/kL
Tier 2 Consumption (201–300kL pa)	\$0.90/kL
Tier 3 Consumption (in excess of 300kL pa)	\$1.32/kL
Water Access Charge	\$41.79/quarter

TABLE C6

Brisbane commercial vacant land charges (2011/12)

Vacant land charges	Charge
Water Access Charge	\$41.79/quarter

TABLE C7

Brisbane trade waste charges (2011/12)

Trade waste categories	Classification	Charge
Application	An application fee of \$150 may be payable. Please contact Queensland Urban Utilities before making payment. Note: please do not arrange payment (including cheque) before checking with Queensland Urban Utilities.	\$150
Category A	Minor trader (e.g. small food outlet or workshop) with no water meter or trade waste flow that is hard to measure.	\$87.81/quarter (minimum charge)
Category B	Discharge greater than 67kL/quarter (e.g. larger restaurant, lower-impact food processor). Assumed domestic strength – BOD5 250mg/L Suspended solids 250mg/L Total Kjeldahl Nitrogen (TKN) 35mg/L Total Phosphorus (TP) 10mg/L	\$1.29/kL
Category C	Discharge greater than 87kL/quarter (e.g. anodising plant, electroplater, low-impact manufacturers). Assumed less than domestic strength – BOD5 100mg/L Suspended solids 200mg/L Total Kjeldahl Nitrogen (TKN) 13mg/L Total Phosphorus (TP) 10mg/L	\$1.00/kL
Category D	Large discharge and high-strength waste >20kg/day BOD (e.g. major manufacturer, brewery, cannery, synthetic polymers, abattoirs). Fully assessed for quality by routine sampling and chemical testing. Volume SS = suspended solids BOD standard rate BOD discounted Nitrogen Phosphorus	Assessed quality charged on: Volume – \$0.87/kL SS \$0.78/kg BOD standard – \$0.85/kg BOD discounted – \$0.65/kg Nitrogen – \$1.94/kg Phosphorus – \$1.54/kg

TABLE C8

Ipswich residential water charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$1.79/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 320kL per annum)	\$0.81/kL
Tier 2 Consumption (321–480kL per annum)	\$1.29/kL
Tier 3 Consumption (in excess of 480kL)	\$1.64/kL
Water Access Charge	\$70.00/quarter

TABLE C9

Ipswich residential wastewater charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge	\$137.50/quarter

TABLE C10

Ipswich residential vacant land access charges (2011/12)

Vacant land access charges	Charge
Vacant Access Charge	\$70.00/quarter
Water Access Charge – connected but not metered	\$252.12/quarter

TABLE C11

Ipswich commercial water charges (2011/12)

Vacant land access charges	Charge
Vacant Access Charge	\$70.00/quarter
Water Access Charge – connected but not metered	\$252.12/quarter

TABLE C12

Ipswich commercial water charges by connection size (2011/12)

Connection size	Charge
26–32mm	\$180.42/quarter
33–40mm	\$286.80/quarter
41–50mm	\$422.79/quarter
51–80mm	\$1070.46/quarter
81–100mm	\$1802.97/quarter
101–150mm	\$4310.16/quarter
151–250mm	\$7183.59/quarter
Greater than 250mm	\$8620.32/quarter
Fire service connection all sizes	\$111.75/quarter

TABLE C13

Ipswich commercial wastewater charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge (per pedestal or urinal flushing unit)	\$141.99/quarter

TABLE C14

Ipswich commercial vacant land access charges (2011/12)

Vacant land access charges	Charge
Water Access Charge	\$83.22/quarter
Sewerage Access Charge	\$141.99/quarter

TABLE C15

Ipswich metered standpipe water charges (2011/12)

Wastewater service charges	Charge
Consumption Charge	\$3.13/kL

TABLE CI6

Ipswich trade waste charges (2011/12)

Trade waste categories	Classification	Charge
Category 1	Low-strength/low-volume discharge: Volume <500kL/annum COD <600mg/L Suspended solids <300mg/L Oil and grease <100mg/L Sulphate (SO ₄) <500mg/L Total nitrogen <60mg/L Total phosphorous <15mg/L pH 6-11	\$84.09/quarter (minimum charge)
Category 2	Low-strength/high-volume discharge: Volume >500kL/annum COD <600mg/L Suspended solids <300mg/L Oil and grease <100mg/L Sulphate (SO ₄) <500mg/L Total nitrogen <60mg/L Total phosphorous <15mg/L pH 6-11	\$115.44/quarter + \$1.33/kL
Category 3	High-strength/all-volume discharge: Assessed quality charged on flow and concentration of contaminants above Baseline Discharge Limits. Volume >500kL/annum COD >600mg/L Suspended solids >300mg/L Sulphate (SO ₄) >500mg/L Total nitrogen >60mg/L Total phosphorous >15mg/L	\$188.16/quarter + \$1.37/kL \$1.11/kg \$1.32/kg \$1.71/kg \$2.41/kg \$7.41/kg
Category 4	Catchment critical generator: As for Category 3, but where risk assessment indicates potential for this generator to individually compromise attainment of Queensland Urban Utilities' trade waste objectives.	As for Category 3

TABLE CI7

Lockyer Valley residential water service charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$1.79/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 300kL per annum)	\$0.23/kL
Tier 2 Consumption (in excess of 300kL per annum)	\$1.09/kL
Water Access Charge – full pressure	\$70.00/quarter
Water Access Charge – constant flow	\$51.87/quarter

TABLE CI8

Lockyer Valley residential wastewater service charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge	\$105.21/quarter
Sewerage Additional Pedestal	\$79.53/quarter

TABLE C19

Lockyer Valley residential vacant land charges – former Gatton Shire (2011/12)

Vacant land charges – former Gatton Shire		Charge
Water Access Charge – full pressure contiguous	For the first six lots combined as one assessment	\$46.68/quarter
	For the seventh and each additional lot	\$23.34/quarter
Water Access Charge – full pressure non-contiguous	Lots with an area less than 2023m ² (per lot)	\$46.68/quarter
	Lots with an area of 2023m ² or more (per lot)	\$69.99/quarter
Water Access Charge – constant flow contiguous	For the first six lots combined as one assessment.	\$32.85/quarter
	For the seventh and each additional lot.	\$16.41/quarter
Water Access Charge – constant flow non-contiguous	Lots with an area less than 2023m ² (per lot)	\$32.85/quarter
	Lots with an area of 2023m ² or more (per lot)	\$51.87/quarter
Sewerage Access Charge		\$57.75/quarter

TABLE C20

Lockyer Valley residential vacant land charges – former Laidley Shire (2011/12)

Vacant land charges – former Laidley Shire	Charge
Water Access Charge – full pressure	\$70.00/quarter
Water Access Charge – limited flow	\$51.87/quarter
Sewerage Access Charge	\$57.75/quarter

TABLE C21

Lockyer Valley commercial water charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$1.98/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 300kL pa)	\$0.44/kL
Tier 2 Consumption (in excess of 300kL pa)	\$0.87/kL

TABLE C22

Lockyer Valley commercial water access charges – former Gatton Shire (2011/12)

Water access charges – former Gatton Shire	Charge
Water Access Charge – full pressure	
First tenement	\$110.52/quarter
Second to sixth tenement per tenement	\$66.42/quarter
seventh and each additional tenement per tenement	\$55.29/quarter
Water Access Charge – constant flow	
First tenement	\$81.21/quarter
Second to sixth tenement per tenement	\$48.48/quarter
seventh and each additional tenement per tenement	\$40.71/quarter
Water Access Charge – combined residences/businesses serviced by one meter	
Full pressure per tenement	\$110.52/quarter
Water Access Charge – other premises (religious/charitable/non-profit)	
Full pressure per tenement	\$59.37/quarter
Constant flow per tenement	\$42.42/quarter

TABLE C23

Lockyer Valley commercial vacant land water access charges – former Gatton Shire (2011/12)

Water access charges – former Gatton Shire	Charge
Water Access Charge – full pressure contiguous	
First of six lots combined as one assessment	\$65.43/quarter
Seventh and each additional lot per lot	\$32.73/quarter
Water Access Charge – full pressure non-contiguous	
Lots with an area less than 2023m ² per lot	\$65.43/quarter
Lots with an area of 2023m ² or more per lot	\$98.16/quarter
Water Access Charge – constant flow contiguous	
First of six lots combined as one assessment	\$46.05/quarter
Seventh and each additional lot per lot	\$23.01/quarter
Water Access Charge – constant flow non-contiguous	
Lots with an area less than 2023m ² per lot	\$46.05/quarter
Lots with an area of 2023m ² or more per lot	\$72.72/quarter

TABLE C24

Lockyer Valley commercial water access charges – former Laidley Shire (excluding Forrest Hill) (2011/12)

Water access charges – former Laidley Shire (excluding Forrest Hill)		Charge
Water Access Charge – standard		
Full pressure	per tenement	\$98.16/quarter
Constant flow	per tenement	\$72.72/quarter
Water Access Charge – other premises (religious/charitable/non-profit)		
Full pressure	per tenement	\$59.37/quarter
Constant flow	per tenement	\$42.42/quarter
Water Access Charge – water pipeline	per tenement	\$81.21/quarter

TABLE C25

Lockyer Valley commercial vacant land water access charges – former Laidley Shire (excl. Forrest Hill) (2011/12)

Vacant land charges – former Laidley Shire (excluding Forrest Hill)		Charge
Full pressure per tenement		
First of six lots combined as one assessment		\$65.43/quarter
Seventh and each additional lot	per lot	\$32.73/quarter
Water Access Charge – full pressure non-contiguous		
Lots with an area less than 2023m ²	per lot	\$65.43/quarter
Lots with an area of 2023m ² or more	per lot	\$98.16/quarter
Water Access Charge – constant flow contiguous		
First of six lots combined as one assessment		\$46.05/quarter
Seventh and each additional lot	per lot	\$23.01/quarter
Water Access Charge – constant flow non-contiguous		
Lots with an area less than 2023m ²	per lot	\$46.05/quarter
Lots with an area of 2023m ² or more	per lot	\$72.72/quarter

TABLE C26

Lockyer Valley water access charges – Forrest Hill (2011/12)

Water access charges – Forrest Hill		Charge
Water Access Charge – standard		
Full pressure	per tenement	\$87.27/quarter
Water Access Charge – other premises (religious/charitable/non-profit)		
Full pressure	per tenement	\$63.03/quarter
Water Access Charge – vacant land	per tenement	\$87.27/quarter

TABLE C27

Lockyer Valley wastewater charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge (first pedestal)	\$105.21/quarter
Sewerage additional pedestals (per pedestal)	\$79.53/quarter
Sewerage Access Charge – vacant land	\$57.75/quarter
Pressure Sewer Main	\$79.53/quarter

TABLE C28

Preston area

Preston
For the twelve months ending 30 June 2012, the charges for water for properties in the Preston area will be determined by and advised by Toowoomba Regional Council.
Charges are levied on properties in the Preston area, which are connected, or intending to connect to the water main provided by Toowoomba Regional Council.

TABLE C29

Scenic Rim residential water charges (2011/12)

Wastewater service charges	Charge
Queensland Government Bulk Water	\$2.09/kL
Consumption Charge	\$0.83/kL
Water Access Charge (20mm and 25mm connections)	\$70.00/quarter

TABLE C30

Scenic Rim wastewater charges (2011/12)

Wastewater service charges	Charge
Sewerage Access Charge	\$125.00/quarter

TABLE C31

Scenic Rim vacant land access charges (2011/12)

Vacant land charges	Charge
Water Access Charge	\$70.00/quarter
Sewerage Access Charge	\$70.95/quarter

TABLE C32

Scenic Rim commercial water service charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$2.09/kL
Consumption Charge	\$0.83/kL
Water Access Charge per connection (20mm water connection)	\$87.75/quarter

TABLE C33

Scenic Rim commercial wastewater charges (2011/12)

Water service charges	Charge
Sewerage Access Charge (first pedestal)	\$129.72/quarter
Sewerage additional pedestals (per pedestal)	\$78.54/quarter
Water Access Charge per connection (20mm water connection)	\$87.75/quarter

TABLE C34

Water access charges by connection size (2011/12)

Water connection size	Flow capacity factor	Charge
25mm	1.56	\$137.13/quarter
32mm	2.56	\$224.64/quarter
40mm	4.00	\$351.03/quarter
50mm	6.25	\$548.46/quarter
65mm	12.02	\$1054.74/quarter
80mm	16.00	\$1404.06/quarter
100mm	25.00	\$2193.84/quarter
150mm	56.25	\$4936.14/quarter
200mm	100.00	\$8775.39/quarter
Water Access Charge – restricted demand		\$87.75/quarter

TABLE C35

Scenic Rim vacant land charges (2011/12)

Vacant land charges	Charge
Water Access Charge	\$87.75/quarter
Sewerage Access Charge (per lot)	\$70.95/quarter

TABLE C36

Somerset residential water charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$2.36/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 300kL per annum)	\$0.24/kL
Tier 2 Consumption (in excess of 300kL per annum)	\$0.54/kL
Water Access Charge	\$70.00/quarter
Water service charges – Moore and Coominya	Charge
Bore Water Access Charge	\$70.00/quarter

TABLE C37

Somerset residential wastewater charges (2011/12)

Wastewater service charges – Esk, Fernvale, Lowood, and Toogoolawah	Charge
Sewerage Access Charge	\$125.00/quarter
Sewerage Access Charge – vacant land	\$68.82/quarter
Wastewater service charges – Kilcoy	Charge
Sewerage Access Charge	\$99.60/quarter
Sewerage Access Charge – vacant land	\$87.96/quarter

TABLE C38

Somerset commercial water charges (2011/12)

Water service charges	Charge
Queensland Government Bulk Water	\$2.36/kL
Tiered Consumption Charges	
Tier 1 Consumption (first 300kL per annum)	\$0.24/kL
Tier 2 Consumption (in excess of 300kL per annum)	\$0.54/kL
Water Access Charge	\$73.71/quarter

TABLE C39

Somerset commercial wastewater charges –
former Kilcoy Shire (2011/12)

Wastewater service charges – former Kilcoy Shire	Charge
Sewerage Access Charge (government premises)	\$135.24/quarter
Sewerage Access Charge (other non-residential premises)	\$99.60/quarter

TABLE C40

Somerset vacant land charges –
former Kilcoy Shire (2011/12)

Vacant land charges – former Kilcoy Shire	Charge
Sewerage Access Charge – charge per lot	\$87.96/quarter

TABLE C41

Somerset commercial wastewater charges – former Esk Shire (2011/12)

Wastewater service charges – former Esk Shire	Charge
Sewerage Access Charge	\$137.64/quarter
Other Sewerage Access Charges (base charge)	\$137.64/quarter
Building used exclusively for public worship	68% of base charge
Hall on land attracting a General Rate	50% of base charge
Hall (excluding land attracting a General Rate)	68% of base charge
Kindergarten school	68% of base charge
Government premises (excluding Toogoolawah High School)	158% of base charge
General non-residential	100% of base charge
Charge for each additional pedestal, urinal and slop sink	
Building used exclusively for public worship	5% of base charge
Hall	5% of base charge
Kindergarten school	5% of base charge
Premises where toilet facilities are made available	12% of base charge
Charge for pedestal where toilet facilities are made available for customer use	
Hotel or motel	38% of base charge
Nursing home	38% of base charge
Caravan park facility provide for the ordinary travelling public	12% of base charge
Premises where toilet facilities are made available	12% of base charge
Government premises (excluding Toogoolawah High School)	105% of base charge
Other premises	19% of base charge
Racecourse and showgrounds – single charge for all additional pedestals	5% of base charge
Public convenience	50% of base charge
Allotment to which Council is prepared to provide a sewerage service, but which is not supplied with a sewerage service and on which a dwelling or other building is constructed.	50% of base charge

TABLE C42

Somerset vacant land charges –
former Esk Shire (2011/12)

Vacant land charges – former Esk Shire	Charge
Sewerage Access Charge – charge per lot	50% of base charge

TABLE C43

Brisbane 2011/12 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$4620	\$9380	\$14,000
	1-2 Bedroom	\$3300	\$6700	\$10,000
Non-residential short-term	3+ Bedroom	\$2310	\$4690	\$7000
	1-2 Bedroom	\$1650	\$3350	\$5000
Non-residential long-term	3+ Bedroom	\$4620	\$9380	\$14,000
	1-2 Bedroom	\$3300	\$6700	\$10,000

TABLE C44

Brisbane 2011/12 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$12	\$24	\$36
Commercial (bulk goods)	\$12	\$24	\$36
Commercial (retail)	\$12	\$24	\$36
Commercial (office)	\$12	\$24	\$36
Education	\$12	\$24	\$36
Entertainment	\$20	\$40	\$60
Indoor sport and recreation (non-court areas)	\$20	\$40	\$60
Indoor sport and recreation (court areas)	\$2	\$3	\$5
Industry	\$12	\$24	\$36
High-impact industry	\$13	\$27	\$40
Low-impact rural	No charge		
High-impact rural	\$3	\$7	\$10
Essential services	\$12	\$24	\$36
Specialist uses	Individual charge		
Minor uses	No charge		

TABLE C45

Lockyer Valley 2011/12 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$4232	\$8268	\$12,500
	1-2 Bedroom	\$3656	\$7144	\$10,800
Non-residential short-term	3+ Bedroom	\$2116	\$4134	\$6250
	1-2 Bedroom	\$1828	\$3572	\$5400
Non-residential long-term	3+ Bedroom	\$4232	\$8268	\$12,500
	1-2 Bedroom	\$3656	\$7144	\$10,800

TABLE C46

Lockyer Valley 2011/12 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$10	\$19	\$29
Commercial (bulk goods)	\$24	\$47	\$71
Commercial (retail)	\$24	\$47	\$71
Commercial (office)	\$24	\$47	\$71
Education	\$24	\$47	\$71
Entertainment	\$34	\$66	\$100
Indoor sport and recreation (non-court areas)	\$34	\$66	\$100
Indoor sport and recreation (court areas)	\$2	\$3	\$5
Industry	\$10	\$19	\$29
High-impact industry	\$15	\$28	\$43
Low-impact rural	No charge		
High-impact rural	N/A		
Essential services	\$10	\$19	\$29
Specialist uses	Individual charge		
Minor uses	No charge		

TABLE C47

Somerset 2011/12 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$1800	\$8200	\$10,000
	1-2 Bedroom	\$1300	\$7700	\$9000
Non-residential short-term	3+ Bedroom	\$900	\$4100	\$5000
	1-2 Bedroom	\$650	\$3850	\$4500
Non-residential long-term	3+ Bedroom	\$1800	\$8200	\$10,000
	1-2 Bedroom	\$1300	\$7700	\$9000

TABLE C48

Somerset 2012/13 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$1800	\$10,450	\$12,250
	1-2 Bedroom	\$1300	\$7700	\$9000
Non-residential short-term	3+ Bedroom	\$900	\$5225	\$6125
	1-2 Bedroom	\$650	\$3850	\$4500
Non-residential long-term	3+ Bedroom	\$1800	\$10,450	\$12,250
	1-2 Bedroom	\$1300	\$7700	\$9000

TABLE C49

Somerset 2011/12 and 2012/13 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$4	\$21	\$25
Commercial (bulk goods)	\$9	\$54	\$63
Commercial (retail)	\$9	\$54	\$63
Commercial (office)	\$9	\$54	\$63
Education	\$9	\$54	\$63
Entertainment	\$9	\$54	\$63
Indoor sport and recreation (non-court areas)	\$9	\$54	\$63
Indoor sport and recreation (court areas)	\$1	\$4	\$5
Industry	\$4	\$21	\$25
High-impact industry	\$6	\$34	\$40
Low-impact rural	No charge		
High-impact rural	N/A		
Essential services	\$10	\$19	\$29
Specialist uses	Individual charge		
Minor uses	No charge		

TABLE C50

Scenic Rim 2011/12 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$2412	\$10,088	\$12,500
	1-2 Bedroom	\$1698	\$7102	\$8800
Non-residential short-term	3+ Bedroom	\$1206	\$5044	\$6250
	1-2 Bedroom	\$849	\$3551	\$4400
Non-residential long-term	3+ Bedroom	\$2412	\$10,088	\$12,500
	1-2 Bedroom	\$1698	\$7102	\$8800

TABLE C51

Scenic Rim 2011/12 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$3	\$12	\$15
Commercial (bulk goods)	\$6	\$24	\$30
Commercial (retail)	\$6	\$24	\$30
Commercial (office)	\$6	\$24	\$30
Education	\$6	\$24	\$30
Entertainment	\$6	\$24	\$30
Indoor sport and recreation (non-court areas)	\$10	\$40	\$50
Indoor sport and recreation (court areas)	\$1	\$4	\$5
Industry	\$6	\$24	\$30
High-impact industry	\$8	\$32	\$40
Low-impact rural	No charge		
High-impact rural	N/A		
Essential services	\$6	\$24	\$30
Specialist uses	Individual charge		
Minor uses	No charge		

TABLE C52

Scenic Rim 2011/12 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$2364	\$7136	\$9500
	1-2 Bedroom	\$1698	\$7102	\$8800
Non-residential short-term	3+ Bedroom	\$1182	\$3568	\$4750
	1-2 Bedroom	\$849	\$3551	\$4400
Non-residential long-term	3+ Bedroom	\$2364	\$7136	\$9500
	1-2 Bedroom	\$1698	\$7102	\$8800

TABLE C53

Scenic Rim 2012/13 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$2364	\$9636	\$12,000
	1-2 Bedroom	\$1698	\$7102	\$8800
Non-residential short-term	3+ Bedroom	\$1182	\$4818	\$6000
	1-2 Bedroom	\$849	\$3551	\$4400
Non-residential long-term	3+ Bedroom	\$2364	\$9636	\$12,000
	1-2 Bedroom	\$1698	\$7102	\$8800

TABLE C54

2011/12 and 2012/13 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$3	\$12	\$15
Commercial (bulk goods)	\$6	\$24	\$30
Commercial (retail)	\$6	\$24	\$30
Commercial (office)	\$6	\$24	\$30
Education	\$6	\$24	\$30
Entertainment	\$6	\$24	\$30
Indoor sport and recreation (non-court areas)	\$10	\$40	\$50
Indoor sport and recreation (court areas)	\$1	\$4	\$5
Industry	\$6	\$24	\$30
High-impact industry	\$8	\$32	\$40
Low-impact rural	No charge		
High-impact rural	N/A		
Essential services	\$6	\$24	\$30
Specialist uses	Individual charge		
Minor uses	No charge		

TABLE C55

Scenic Rim 2011/12 and 2012/13 standard charges (residential and non-residential accommodation)

Type of development (dwelling)		Water	Sewerage	Total
Residential	3+ Bedroom	\$5000	No charge	\$5000
	1-2 Bedroom	\$3500	No charge	\$3500
Non-residential short-term	3+ Bedroom	\$2500	No charge	\$2500
	1-2 Bedroom	\$1750	No charge	\$1750
Non-residential long-term	3+ Bedroom	\$5000	No charge	\$5000
	1-2 Bedroom	\$3500	No charge	\$3500

TABLE C56

Scenic Rim 2011/12 and 2012/13 standard charges (non-residential development)

Type of development	Charge per m ² of GFA		
	Water	Sewerage	Total
Assembly	\$5	No charge	\$5
Commercial (bulk goods)	\$10	No charge	\$10
Commercial (retail)	\$10	No charge	\$10
Commercial (office)	\$10	No charge	\$10
Education	\$10	No charge	\$10
Entertainment	\$10	No charge	\$10
Indoor sport and recreation (non-court areas)	\$17	No charge	\$17
Indoor sport and recreation (court areas)	\$2	No charge	\$2
Industry	\$10	No charge	\$10
High-impact industry	\$13	No charge	\$13
Low-impact rural	No charge		
High-impact rural	NA		
Essential services	\$10	No charge	\$10
Specialist uses	Individual charge		
Minor uses	No charge		

APPENDIX D

GROWTH AREAS – BRISBANE

TABLE DI

Major infrastructure requirements and growth areas – Brisbane

Growth Area	Northshore Hamilton Urban Development Area	Bowen Hills Urban Development Area	Fitzgibbon Urban Development Area	West End/South Brisbane	Woolloongabba	Milton	Toowong/Auchenflower	Fortitude Valley	Rochedale	Lower Oxley Creek (Oxley Wedge)	Australia Trade Coast	Brisbane Airport	Richlands/Wacol
Anticipated population increase to 2031 (thousands of equivalent population)	18	16	6	18	7	2	17	10	16	10	25	15	10
Major infrastructure proposed													
Water supply													
900mm diameter main from Murarrie to Pinkenba, including twin 750mm diameter Brisbane River crossing (2013-2016)	x										x	x	
Wastewater													
2400mm diameter sewer tunnel from Cooksley Street to Hamilton Siphon (2020-2025)		x		x	x	x	x	x					
2400mm diameter sewer tunnel from Hamilton Siphon to Eagle Farm PS (2025-2030)		x		x	x	x	x	x					
1840mm diameter rising main from Serpentine Road to Luggage Point WWTP (2020-2025)	x	x		x	x	x	x	x			x	x	
Capacity upgrade to Luggage Point WWTP (2020-2025)	x	x		x	x	x	x	x			x	x	

x indicates growth areas serviced by these key infrastructure items.

APPENDIX E

BULK WATER DEMAND FORECAST

Table E1 – Queensland Urban Utilities bulk water demand forecast. 122

Table E2 – Resident population – based on SEQ Regional Plan 2031 123

TABLE E1

Queensland Urban Utilities bulk water demand forecast

Seqwater treatment plant	Queensland Urban Utilities' water distribution		Average day demand (ML/d)				
	Region	Service Locality	2011	2016	2021	2026	2031
Mt Crosby / North Pine / Enoggera / Molendinar	Brisbane City Council	The Gap	2.95	4.29	4.46	4.47	4.48
		Rest of Brisbane	269.29	375.61	395.05	405.83	412.45
	Ipswich City Council	Ipswich	48.25	82.87	98.37	116.03	133.81
Esk	Somerset Regional Council	Esk	0.76	1.01	1.04	1.09	1.17
		Toogoolawah					
Somerset Dam		Somerset Dam	0.07	0.09	0.09	0.09	0.09
Linville		Linville	0.04	0.05	0.05	0.05	0.06
Kilcoy		Kilcoy	2.11	2.48	2.66	2.85	4.55
Jimna		Jimna	0.02	0.02	0.02	0.02	0.02
Lowood		Fernvale, Lowood	1.45	2.85	3.45	3.95	4.23
	Lockyer Valley Regional Council	Glenore Grove, Gatton, Helidon, Withcott, Grantham, Forrest Hill, Laidley	5.45	10.85	12.41	14.03	15.90
Kalbar	Scenic Rim Regional Council	Aratula	1.39	1.91	2.19	3.09	3.49
		Boonah					
		Kalbar					
		Mt Alford					
Beaudesert		Beaudesert	1.70	3.48	4.63	6.59	8.52
		Bromelton	0.00	0.49	0.82	1.14	1.52
Kooralbyn		Kooralbyn	0.44	0.59	0.75	0.96	1.06
Rathdowney		Rathdowney	0.05	0.05	0.05	0.05	0.05
Canungra		Canungra	0.23	0.40	0.60	0.78	0.91

TABLE E2

Resident population – based on SEQ Regional Plan 2031

Region	2010	2011	2016	2021	2026	2031
Brisbane	1,067,279	1,086,096	1,168,625	1,223,930	1,252,159	1,270,000
Ipswich	168,131	173,380	218,579	277,191	351,265	435,000
Lockyer Valley	36,591	37,615	43,388	49,229	55,188	61,000
Scenic Rim	38,304	39,300	45,936	53,368	61,720	71,000
Somerset	22,519	22,933	25,760	28,614	31,359	34,000



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