Redland Water

Water Netserv Plan

PART A

Redland WATER

Redland CITY COUNCIL

Version Control

Version Number	Description of Change	Author	Date	Approval
Rev 0	First draft – for public consultation	Matthew Ingerman	September 2012	Bradley Taylor Gary Soutar
Rev 1	Revisions following public consultation	Matthew Ingerman	April 2013	Bradley Taylor
Rev 2	Issue for Council adoption & State endorsement	Matthew Ingerman	February 2014	Bradley Taylor Gary Soutar
Rev 3	Inclusion of future connection area mapping	Matthew Ingerman	August 2014	Bradley Taylor Gary Soutar

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Executive summary

Redland Water (RW) recommenced operations on 1 July 2012 as a commercial business unit of Redland City Council (RCC). As a south-east Queensland (SEQ) service provider, the *South-east Queensland Water (Distribution and Retail Restructuring) Act 2009* requires RW to have a *Water Netserv Plan* from 1 March 2014. The *Water Netserv Plan* must be consistent with the SEQ Regional Plan 2009-2031 and with the planning assumptions for RCC. The *Water Netserv Plan* will be the key strategic document outlining the services RW provides and will guide the delivery and operation of its infrastructure. The *Water Netserv Plan* comprises the following two parts:

- **Part A** – contains public information concerning RW's water and wastewater services;
- **Part B** – comprises an internal planning document to inform RW's overall strategic direction.

RW is committed to providing its customers with highly efficient water and wastewater services. This *Water Netserv Plan – Part A* establishes the background and context for RW's business, together with the infrastructure planning and development activities which are critical to meeting its customer commitments. It provides an overview of the following:

- RW's vision, mission, role within the SEQ water grid and key stakeholders;
- the alignment between the *Water Netserv Plan* and RW's corporate strategies and goals;
- RW's core products and services, connection areas and service standards;
- the types of connections available and associated conditions of use;
- the demand management activities used to manage water consumption by the community;
- the charges to RW's customers in order to provide the products, services and infrastructure;
- planning activities employed to support growth and sustainability across the region;
- existing infrastructure, together with related key performance indicators; and
- the capital works program and major projects planned over the near future.

1. Redland Water

Redland Water is a commercial business unit of RCC and recommenced operations on 1 July 2012. Its primary functions are to provide its customers with safe, reliable and high quality water services, as well as to collect and treat wastewater. RW is also responsible for charging customers for water and wastewater services.

RW owns, operates and maintains assets currently valued at around $432 million. This will grow to approximately $460 million by 2015-16. This continued investment in water and wastewater infrastructure reflects the need to meet the requirements of a growing population, which is projected to be in excess of 180,000 people by 2031.

1.1 Redland City Council

RCC in SEQ consists of 537 square kilometres comprising mainland and island communities (with approximately 9,769 hectares of bushland under conservation). It is located on Moreton Bay and borders Brisbane City, Logan City and Gold Coast City Councils. Its economy consists of retail, health and community, education, manufacturing and tourism.

1.2 Redland City Council vision, mission, values and objectives

As a business unit of RCC, RW aligns with RCC's vision, mission and value statements as set out in the *Redland City Council Corporate Plan 2010-2015*[1] which provides the following vision, mission and value statements:

Vision

Enhancing community spirit, lifestyle and the natural environment

Mission

To be a sustainable and effective, organisation with clever and caring people

Values

- Strive to achieve sustainability in our organisation and our community
- Support community engagement and leadership
- Continuously improve our services
- Carefully manage our finances and deliver value for money
- Deliver excellent customer service
- Be an ethical and transparent organisation
- Treat people with respect and value diversity
- Listen to our community and engage effectively with them.

[1] Redland City Council Corporate Plan 2010-2015 – http://www.redland.qld.gov.au/AboutCouncil/CommunityPlan/Documents/Corporate_Plan/CorporatePlan2010-15.pdf

RCC's objectives are:

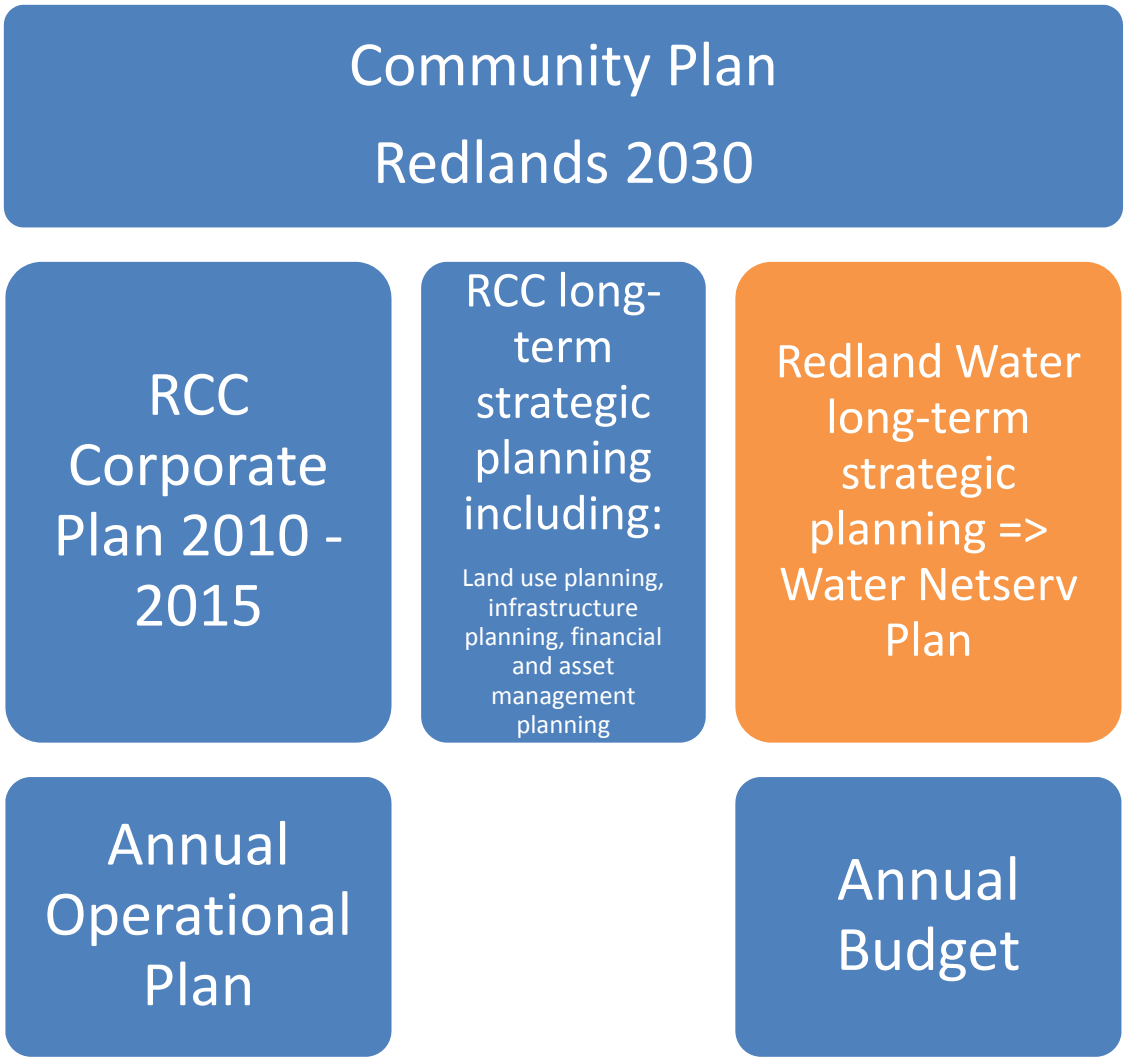
Objectives

- Healthy natural environment
- Green living
- Embracing the bay
- Quandamooka country
- Wise planning and design
- Supportive and vibrant economy
- Strong and connected communities
- Inclusive and ethical governance
- An efficient and effective organisation

1.3 Redland Water – strategic alignment

The RCC corporate plan is directly linked to all council's long-term, strategic planning documents. This ensures a clear link exists between community needs and expectations, corporate strategic direction and priorities, policy and day-to-day activities. The link is described in the corporate plan by the following diagram:

The re-establishment of RW will see the relationship between the RCC long-term strategic planning documents expand to include the *Water Netserv Plan* as indicated in the following diagram:



Although not shown above, the RW *Water Netserv Plan* will also be cognisant of RCC's *Total Water Cycle Management Plan (TWCM Plan)*.

In order to address key result areas within RCC's 9 corporate plan objectives, RW will strive to achieve the following goals:

- supply healthy water in an ecologically sustainable manner by planning, designing, constructing, operating and maintaining a high quality water distribution system; and
- process wastewater in an ecologically sustainable manner by planning, designing, constructing, operating and maintaining a system for the collection, treatment and disposal of wastewater and biosolids.

RCC strategies such as the *Asset Management Strategy*, (draft) *Local Growth Management Strategy/ future Redland Town Plan*, *TWCM Plan* and *Financial Strategy 2012-2022* will be key documents to drive RW towards achieving its goals.

1.4 Redland Water's stakeholders

RW places great importance on engaging with stakeholders, as well as maintaining and strengthening current relationships to improve the way it operates. Table 1-1 outlines a number of its key stakeholders and the associated requirements.

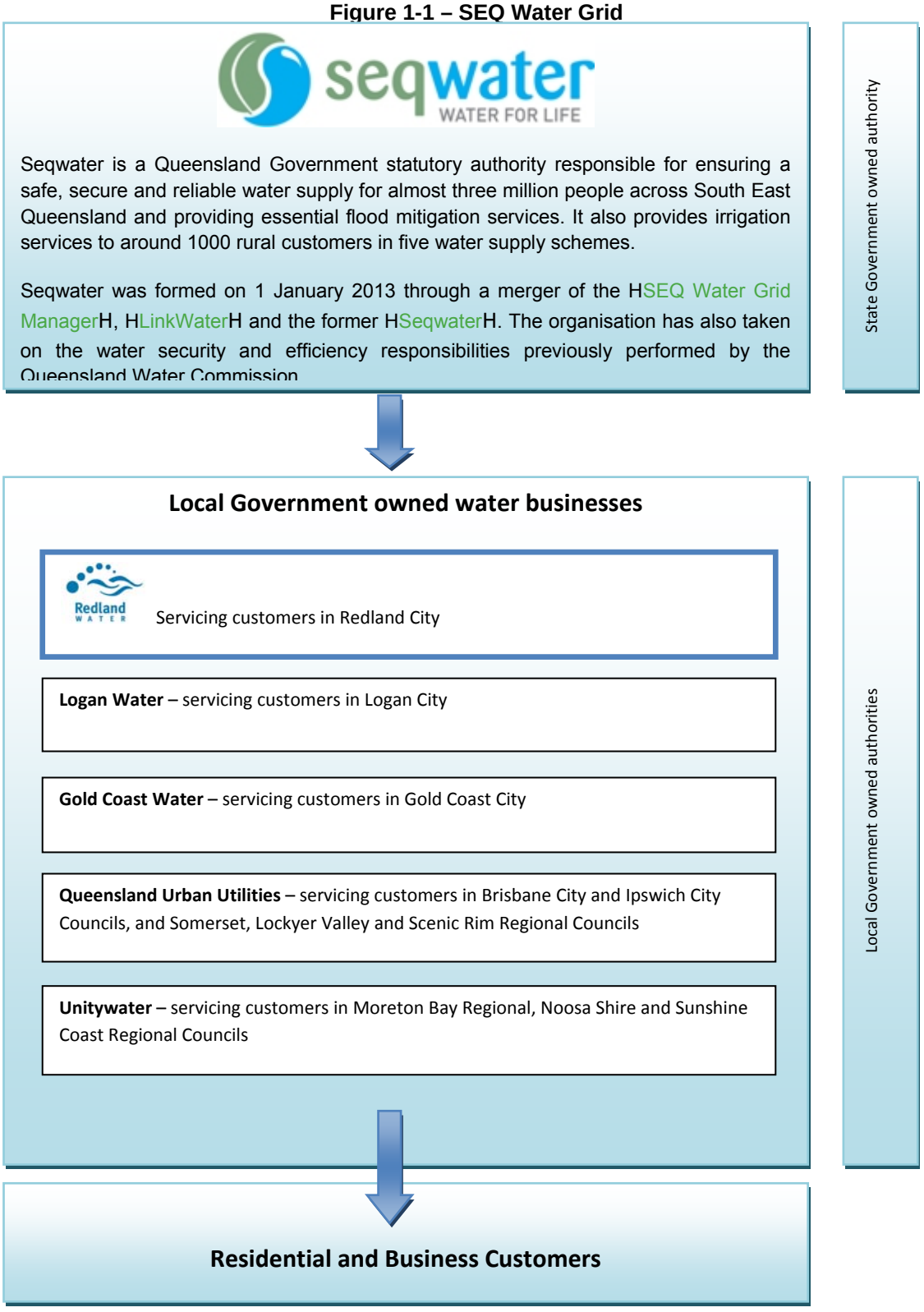
Table 1-1 – Key stakeholders and their requirements

STAKEHOLDERS	REQUIREMENTS
Redland City Council	Satisfying RCC's needs for returns on investment support for local economic development and growth, as well as providing safe, quality water and wastewater products and services.
Customers	The customer is at the core of everything RW does and delivering high standards of customer care is critical. This is reinforced through its decision-making and actions which focus on outstanding commitment to customer service through connectivity with the community.
State government	The Queensland government is looking for investments based on commercially sound decisions which will deliver infrastructure more efficiently, compliance with legislative and regulatory requirements and a balanced approach between meeting funding requirements for future investment and socially and economically sustainable price increases.
Industry	At a strategic level, RW's affiliation with local and state government departments will allow it to understand legislative and regulatory requirements to ensure it continually meets its responsibility to protect the environment and support sustainable practices. Within the industry, its relationship with participants of the SEQ water grid, fellow water businesses (Queensland Urban Utilities and Unitywater, Gold Coast Water and Logan Water), developers, suppliers, industry associations and community reference groups will allow it to collaborate to work towards achieving common goals.

1.5 Redland Water's role in the SEQ water grid

RW is one part of an extensive water grid operating in SEQ. Figure 1-1 shows its relationship with the other participants, in their roles, as they currently exist.

Figure 1-1 – SEQ Water Grid



[2] Sourced: http://www.seqwater.com.au/ accessed 15/01/13 at 10:09am.

2. Redland Water's products and services

RW is responsible for the provision of water and wastewater services to consumers throughout the Redland local government area. Its core products and services include:

- drinking water supply;
- non-Class A+ recycled water supply;
- wastewater collection and treatment; and
- trade waste management.

2.1 Drinking water

RW distributes drinking water to around 60,000 properties via a network of reservoirs, pump stations and mains. This water is sourced from Seqwater, which owns dams, water treatment plants and the Gold Coast desalination plant and bulk transport mains. Seqwater determines the applicable source to be used based on the overall water security requirements for the region.

To ensure water quality meets applicable standards and guidelines, all drinking water service providers, including Seqwater and RW are required to have an approved Drinking Water Quality Management Plan (DWQMP) in place. These plans are reviewed and approved by the regulator administering the *Water Supply Safety and Reliability Act*.

2.2 Special health needs

Customers have a right to register with RW if there is a need for water to maintain life support, such as a dialysis machine. Customers may also register other special medical needs.

RW maintains a register of residential properties and hospitals that operate dialysis machines. This information is available to our Operations personnel to ensure a continuous supply of drinking water is maintained (if necessary) at these locations. The water meter is coloured blue to denote these properties in the event of a burst water main or a planned shutdown of the water supply for maintenance purposes. Temporary alternative water supply may be provided from a drinking water tanker or by connecting the property to water supply from a nearby water main. If the situation becomes life threatening, emergency services should be called immediately on 000. To obtain a copy of RW's policy and guidelines[3] concerning the management of dialysis remissions or to register any special health needs, customers should contact Council's Customer Service team.

2.3 Recycled water

Recycled water is wastewater that has been filtered and disinfected. Capalaba and Victoria Point wastewater treatment plants (WWTPs) both have Class A.

Class B recycled water is supplied to the Redland Bay golf course from the Victoria Point WWTP. Cleveland and Capalaba WWTPs have the facilities to supply recycled water to customers via tanker filling stations.

Excess recycled water that is not re-used by RW's recycled water customers is released to the environment in accordance with development approval and release limits.

[3] Water Charge Remissions for Home Dialysis Machine Users

http://rcc/PGP/PGP/POL-0027%20Water%20Charge%20Remissions%20for%20Home%20Dialysis%20Machine%20Users.pdf

Table 2-1 – Allowable and non-allowable uses for non-Class A+ recycled water

ALLOWABLE USES	NON-ALLOWABLE USES
Irrigation of parks, gardens and ovals	Drinking
Irrigation of playing fields and golf courses	Cooking and kitchen purposes
Irrigation of roadside plants	Toilet flushing
Dust suppression on construction sites and roadworks	Fire fighting
	Personal washing (baths, showers, bidets, basins)
	Washing clothes
	Washing cars
	Swimming pools and spas
	Recreation (playing under sprinklers / water toys)
	Water source for pets and livestock
	Commercial or industrial food processing
	Filling ponds, lakes, water bodies and tanks

2.4 Wastewater collection and treatment

RW owns and operates 7 WWTPs which treat incoming wastewater collected from almost 50,000 properties across the existing wastewater connection area via a network of pump stations and mains. Each year, these treatment plants collectively process around 11,250 megalitres of wastewater. The majority of the treated wastewater is released to the environment in accordance with relevant development permit conditions. However, approximately 2.5% of the treated water is recycled and provided to customers as Class B recycled water.

RW operates its WWTPs in accordance with conditions of approval, relevant guidelines and policies and its general environmental obligations under the *Environmental Protection Act 1994*. Substantial equipment, systems and processes are used at each of the WWTPs to minimise the risk of wastewater overflows and to control odour. Comprehensive testing and analysis of wastewater is regularly undertaken to monitor quality. A stringent reporting regime is in place for identified non-compliances with quality requirements. Extensive incident management plans have also been established should an event occur which may impact on the environment and/or public health and safety.

2.5 Trade waste management

Trade waste is liquid waste generated from any business (commercial and industrial) other than normal domestic wastewater from toilets, hand basins and showers.

Wastes like cooking oil, grease and food solids are produced by thousands of food outlets within the RW connection area every day. Should this waste be illegally dumped or discharged directly into the wastewater network, it can block the system and cause overflows that have a negative impact on public health and the environment. To prevent this from happening, all businesses that discharge greasy wastewater must have a grease trap installed.

Trade waste may also contain a variety of toxic or harmful substances, such as heavy metals, organic compounds, solvents, oils and grease, explosive substances, gross solids and chlorinated organic compounds. Municipal WWTPs are not designed to treat these substances, which may also pose a health and safety risk to our staff working at the treatment plants. Businesses may only discharge waste to the wastewater network that complies with RW's wastewater admission standards. These

standards set limits on the allowable concentration of many potentially harmful substances and completely prohibit discharge of other substances.

Water Netserv Plan

The *South-east Queensland Water (Distribution and Retail) Act 2009* requires RW to have a *Water Netserv Plan* in place from 1 March 2014. The *Water Netserv Plan* must be consistent with the *South-east Queensland Regional Plan 2009-2031* and with the planning assumptions for RCC. It will be the key strategic document guiding the delivery and operation of RW's infrastructure and services.

3. Purpose (statement of intent)

The purpose of the *Water Netserv Plan* is to:

- ensure the provision of safe, reliable and secure water and wastewater services;
- provide for strategic planning for the operation of the business;
- provide infrastructure planning for water and wastewater services for at least 20 years;
- integrate land use planning and infrastructure planning for water and wastewater services;
- provide for the management of water and wastewater services in a way that seeks to achieve ecological sustainability.

4. Form and content

To meet legislative requirements, the Water Netserv Plan comprises the following 2 separate parts. The content of each part is outlined in Table 4-1.

- **Part A** – contains public information concerning RW's water and wastewater services
- **Part B** – comprises an internal planning document to inform its overall strategic direction.

Table 4-1 - *Water Netserv Plan* contents

PART A	PART B
Product and services Customer service standards Connections policy Demand management strategy Charges schedule relating to: • service usage; • connections; • infrastructure provision Assumptions about future development and infrastructure demand Desired standards of service Trunk network plans identifying existing and future trunk infrastructure Timeframes for the provision of future trunk infrastructure Mechanisms used to achieve effective outcomes Other matters prescribed under a regulation	Mechanisms used to meet performance targets and service standards for the operation, maintenance and replacement of existing infrastructure Planning of new infrastructure to meet expected future development and future growth Measures used to minimise system water leakage Measures used to minimise sewerage overflows Drinking water quality management measures undertaken to protect public health Total water cycle management information Mechanisms used to achieve ecological sustainability Trade waste management information Recycled water management information Other matters prescribed under a regulation

To assist with navigating this *Water Netserv Plan* relative to the requirements of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, the following lookup (Table 4-2) is provided.

Table 4-2 - Legislation references

SECTION 99BO – Requirements of a Water Netserv plan	INCLUDED	WATER NETSERV PLAN LINK
(a) state the relevant planning assumptions on which the plan is based	✓	Planning assumptions
(b) include information outlining the SEQ service provider's infrastructure networks for its water service and wastewater service, including information about the capacity of each network to service existing and proposed customers	✓	Redland Water's networks Redland Water's network planning
(c) include information outlining any proposed increases in the capacity of the infrastructure networks, including information about the areas into which the networks are to be extended and timeframes for increasing the capacity	✓	Redland Water's network upgrades
d) state the desired standard of service for infrastructure used to provide the SEQ service provider's water service and wastewater service	✓	Desired standards of service
(e) include information outlining the SEQ service provider's strategy for demand management for water	✓	Demand management
(f) state the SEQ service provider's policy for connections to its infrastructure networks for its water service and wastewater service (connections policy), including: (i) the areas (each a connection area) in which the SEQ service provider guarantees to provide connections that comply with its connection criteria to its water service or wastewater service; and (ii) the areas (each a future connection area) in which the SEQ service provider intends to extend its infrastructure network; and (iii) the circumstances in which the SEQ service provider may approve connection outside a connection area; and (iv)the SEQ service provider's criteria for providing connection, with or without conditions, to its water service or wastewater service; and (v) if the SEQ service provider is a distributor-retailer—each matter stated in section 99BOA; and	✓	Connections policy Redland Water's connection areas 23.3 Premises outside the existing connection area Conditions of use
(g) include a schedule (a charges schedule) containing details of: (i) charges to connect customers to the SEQ service provider's water service and wastewater service; and (ii) charges for a customer's use of the services; and (iii) charges relating to providing infrastructure for the services	✓	Redland Water's charges

SECTION 99BO – Requirements of a Water Netserv plan		INCLUDED	WATER NETSERV PLAN LINK
(h)	indicate how the SEQ service provider proposes to achieve effective outcomes for the provision of water services and wastewater services in: (i) the SEQ service provider's relevant area; and (ii) the SEQ region	✓	Redland Water's performance reporting
(i)	include any other matters prescribed under a regulation	✓	Development assessment

Redland Water's planning – supporting growth and sustainability

5. Redland Water's role in land use and infrastructure planning

Land use planning for the Redland local government area is performed by RCC, in conjunction with the state government. Infrastructure planning is undertaken by RCC's City Infrastructure group for the transport, stormwater and community facilities networks, whilst RW plans the water supply and wastewater networks. As a major infrastructure provider, RW plays an important role in achieving sustainable water and wastewater outcomes for the region. The *Sustainable Planning Act 2009* details the powers, processes, roles and responsibilities of the various parties involved in land use planning and for councils when undertaking infrastructure planning. The *South East Queensland Water (Distribution and Retail Restructuring) Act 2009* sets out the requirements for water businesses when undertaking infrastructure planning.

Prior to 1 July 2010, SEQ water businesses were subject to the same land use and infrastructure planning framework as councils. This framework has changed for water businesses following reform of the water industry. Acknowledging that it will take some time to establish new plans, systems and procedures, under the new framework, transitional arrangements have been implemented. This will mean that existing planning documents and council processes will form the basis of land use and infrastructure decision-making concerning water and wastewater infrastructure until Netserv plans come into operation.

6. South-east Queensland Regional Plan

The *South-east Queensland Regional Plan 2009-2031* is the state government's blueprint for managing regional growth, population change, economic development and for protecting the environment and infrastructure provision. The plan operates in conjunction with other statutory planning tools, including state planning polices, local government planning schemes, state regulatory provisions and development assessment processes.

6.1 SEQ Regional Plan – Redland 2009–2031

Table 6-1 - Projected population and dwelling forecasts

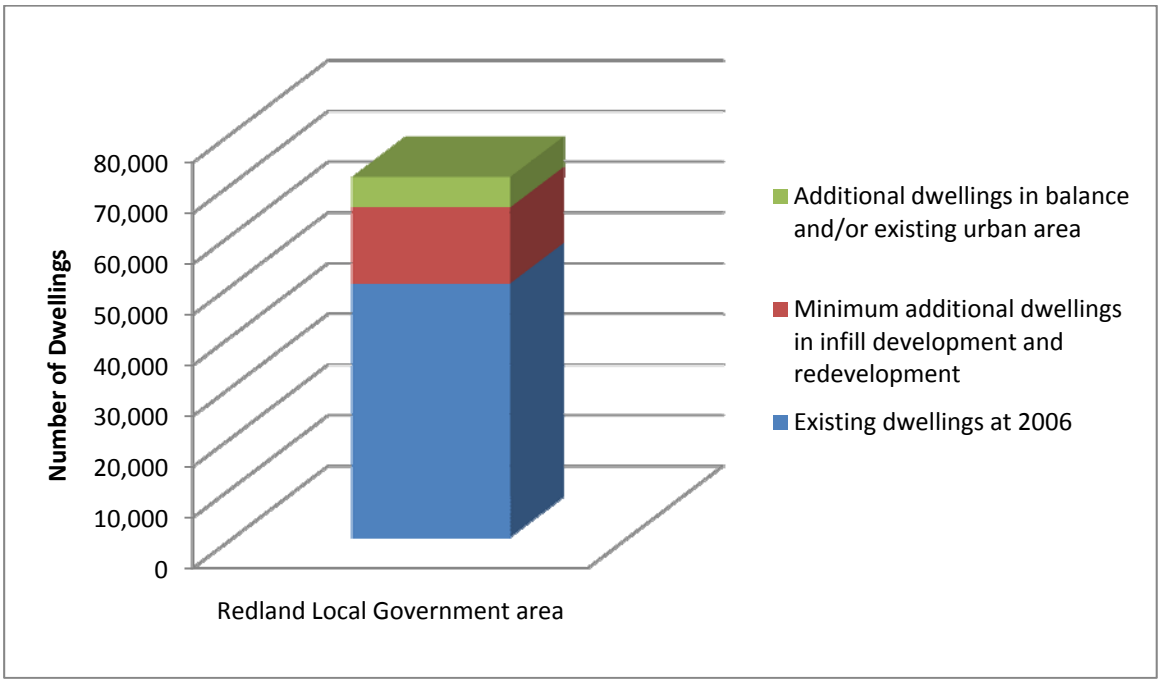
YEAR	POPULATION	ADDITIONAL DWELLINGS
2006	131,000	-
2031	169,000	21,000

The purpose of the *SEQ Regional Plan* is to manage regional growth and change in the most sustainable way to protect and enhance the quality of life in the region. The primary means for achieving this is through the identification of an urban footprint, as a means to control unplanned urban expansion. The *SEQ Regional Plan* is the pre-eminent plan for the SEQ region and reflects and informs state planning policy and priorities.

The *SEQ Regional Plan* was established in 2005 in response to rapid population growth and is reviewed every 5 years. The latest *SEQ Regional Plan* was published in 2009. Over the last 20

years, the population of SEQ has increased from 1.5 million to 2.8 million people. It is expected to reach 4.4 million people by 2031. To accommodate the additional 1.6 million people, it is estimated that an additional 754,000 dwellings will need to be constructed. The *SEQ Regional Plan* forecasts that almost 3% of this growth will occur in the Redland local government area. The following figure shows the existing and planned dwelling forecasts for the Redland local government area in graphical format.

Figure 6-1 - Existing and planned dwelling distribution to 2031



For more detailed and locally focussed population and dwelling projections, refer to the section titled **Redlands Planning Scheme**. That section also identifies reasons behind variations in the projections provided by different authorities.

6.2 Population and employment key growth areas

The following table provides a snapshot of key elements contained in the *SEQ Regional Plan* with regards to population and employment growth areas in the Redland local government area.

Table 6-2 – Population and employment growth areas – Redland

RESIDENTIAL AREAS	
Broadhectare	Kinross Road (Thornlands), south-east Thornlands and Victoria Point
Existing urban areas	Cleveland, Capalaba, Victoria Point, Redland Bay, Thorneside, Thornlands, Birkdale, Wellington Point, Alexandra Hills and Ormiston
REGIONAL ACTIVITY CENTRES	
Principal	Capalaba and Cleveland
Major	Victoria Point
EMPLOYMENT AREAS	
Enterprise	Cleveland Enterprise Area and Redlands Business Park

EMPLOYMENT AREAS	
Health, education & technology	Department of Employment, Economic Development and Innovation – Redland Research Station and Cleveland Hospital Precinct
IDENTIFIED GROWTH AREAS	
None	

By 2031 an additional 21,000 dwellings will be required to house Redland's expected regional growth.

Infill and redevelopment in existing urban areas will accommodate approximately 15,000 additional dwellings.

Infill development will be located around the regional activity centres of Cleveland, Capalaba, Victoria Point and other activity nodes on the public transport network stations and major bus routes. These centres could accommodate residential dwelling units through multi-storey, mixed-use development.

The development of the remaining supply of broadhectare land within the urban footprint will accommodate the remaining dwellings. Broadhectare land availability in Redland is restricted so that existing non-urban land can be enhanced to accommodate koala habitat.

Kinross Road and south-east Thornlands are in proximity to existing urban areas and infrastructure, and capable of accommodating urban development in the short-term. Kinross Road has capacity for a residential community in combination with additional employment opportunities, local retail and commercial functions, and community services. South-east Thornlands will accommodate a residential community with local retail and service functions.

The suburbs of Thorneside, Birkdale, Wellington Point and Ormiston are close to public transport and present opportunities for further development in the longer term, subject to detailed local planning.

Future development opportunities also exist at Cleveland and Redland Bay, and in the Weinam Creek marine area and environs, subject to detailed local planning and infrastructure upgrades.

Employment growth will be focused within Redland City's network of multi-purpose activity centres and in an integrated enterprise precinct at Redland Bay.

The principal regional activity centres of Cleveland and Capalaba will accommodate most of the expected centre-based employment growth. They will become locations for major retail, commercial, community, administrative and recreational activities. Victoria Point and other centres will accommodate the remaining centre-based employment growth.

As well as being consistent with the population projections of the *SEQ Regional Plan*, the *Water Netserv Plan* is also aligned with a number of key programs that are identified under the Desired regional outcome 11 – Water management (DRO 11). Table 6-3 below details the linkages between some of these key programs under DRO11 and this *Water Netserv Plan*.

Table 6-3 – SEQ Regional Plan – Water Management Programs

Desired regional outcome 11 – water management	SEQ Regional Plan Program	How does RW address this desired outcome
11.1 Total water cycle management Principle: Plan and manage water as a valuable and finite regional resource on a total water cycle basis.	11.1.3 Undertake sub-regional total water cycle planning for key development areas and where major water infrastructure is planned, to establish objectives, design parameters and a framework for works delivery. 11.1.4 Develop and implement local total water cycle plans to integrate water cycle management issues not addressed by regional and sub-regional planning.	We have actively participated in sub-regional total water cycle planning for Victoria Point and Redland Bay areas, in partnership with former Queensland Water Commission (QWC). RW is part of the internal stakeholder group for development of the RCC TWCM Plan. *Water Netserv Plan Part B contains RW's TWCM Plan.*
11.2 Water supply planning Principle: Supply sufficient water to support a comfortable, sustainable and prosperous lifestyle, while meeting the needs of urban, industrial and rural growth, and the environment.	11.2.6 Undertake detailed planning and assessment to meet the local water and sewage distribution needs for the region, within the context of regional, sub-regional, local land use and total water cycle plans. 11.2.8 Complete detailed investigations of potential sources of water supply, including centralised and decentralised sources.	Detailed planning and assessment of local water and sewage distribution needs is part of RW's core business. In-line with 11.1.3 above and detailed planning studies regarding the water cycle completed for development areas like south-east Thornlands. *Refer to section: **Redland Water's network planning** in this document.*
11.3 Efficient water use Principle: Achieve targeted reductions in water consumption to decrease pressure on water supplies and the environment.	11.3.4 Implement programs that facilitate non-residential users, including businesses, to move to best practice water use. 11.3.5 Implement demand management programs to meet the water use targets in the draft SEQ Water Strategy. 11.3.6 Design and manage water distribution infrastructure to meet efficiency and loss-reduction targets.	RW provides notifications for residential high users. *Refer to section: **Demand management** in this document.* RW completed a pressure and leakage management project (PLMP) in line with the *Water Act 2000 (Water Amendment Regulation (No. 6) 2006)*. *Water Netserv Plan Part B contains RW's System Leakage Management Plan.*
11.4 Waterway health Principle: Protect and enhance the ecological health, environmental values and water quality of surface and groundwater, including waterways, wetlands, estuaries and Moreton Bay.	11.4.9 Monitor environmental values and the achievement of water quality objectives to assess the health of waterways and the effectiveness of management actions. 11.4.10 Implement actions to achieve the targets in the SEQ Natural Resource Management Plan, including actions in the SEQ Healthy Waterways Strategy.	RW works in conjunction with RCC for regular monitoring of waterways in the local area. RW participates and supports the SEQ Healthy Waterways Strategy. *Water Netserv Plan Part B contains RW's Recycled Water Reuse and Release Management Plan.*

Desired regional outcome 11 – water management	SEQ Regional Plan Program	How does RW address this desired outcome
11.5 Drinking water catchment protection Principle: Manage risks in drinking water catchments to achieve acceptable water quality.	11.5.2 Manage risks to water quality from existing land uses in drinking water catchments. 11.5.3 Address management of catchment risks in drinking water quality management plans.	RW participates with its SEQ water grid colleagues in the preparation of risk-based DWQMPs. Bulk water supplier Seqwater has DWQMPs for their components of the supply network, as does RW. Risks from upstream suppliers are incorporated into RW's risk profile for assessment and determination of mitigation actions. *Water Netserv Plan Part B contains RW's DWQMP.*

7. Redlands Planning Scheme

Local planning is both informed by and must reflect the *SEQ Regional Plan*. Local governments must ensure that the vision, strategic directions and land use pattern specified in the regional plan for the region's future development are furthered by local planning. In this context, planning schemes must integrate these regional requirements whilst balancing the economic, social and environmental needs and aspirations of the local community to provide an orderly approach to land use and change. Overall, a planning scheme:

- outlines the desired outcomes sought for the local government area as a whole;
- allocates land for different uses (e.g. residential, commercial, open spaces etc.);
- coordinates and integrates community, state and regional needs and wants;
- coordinates and integrates infrastructure and land use planning;
- indicates the location of existing and proposed infrastructure;
- includes a priority infrastructure plan;
- includes a structure plan for any master planned areas within the local council area;
- identifies areas or places that constrain the use of land;
- identifies the kind of development that requires approval;
- specifies the standards or criteria for assessing the suitability of a development proposal.

By establishing the future land use pattern for an area, the *Redlands Planning Scheme* provides important input into the development of plans for the provision of water and wastewater infrastructure. In this regard, land use planning allows estimates of future demand for infrastructure to be made. Infrastructure is then planned and provided in response to this demand. Key areas of future development and their accompanying land use planning are elaborated upon as follows.

7.1 Key development areas

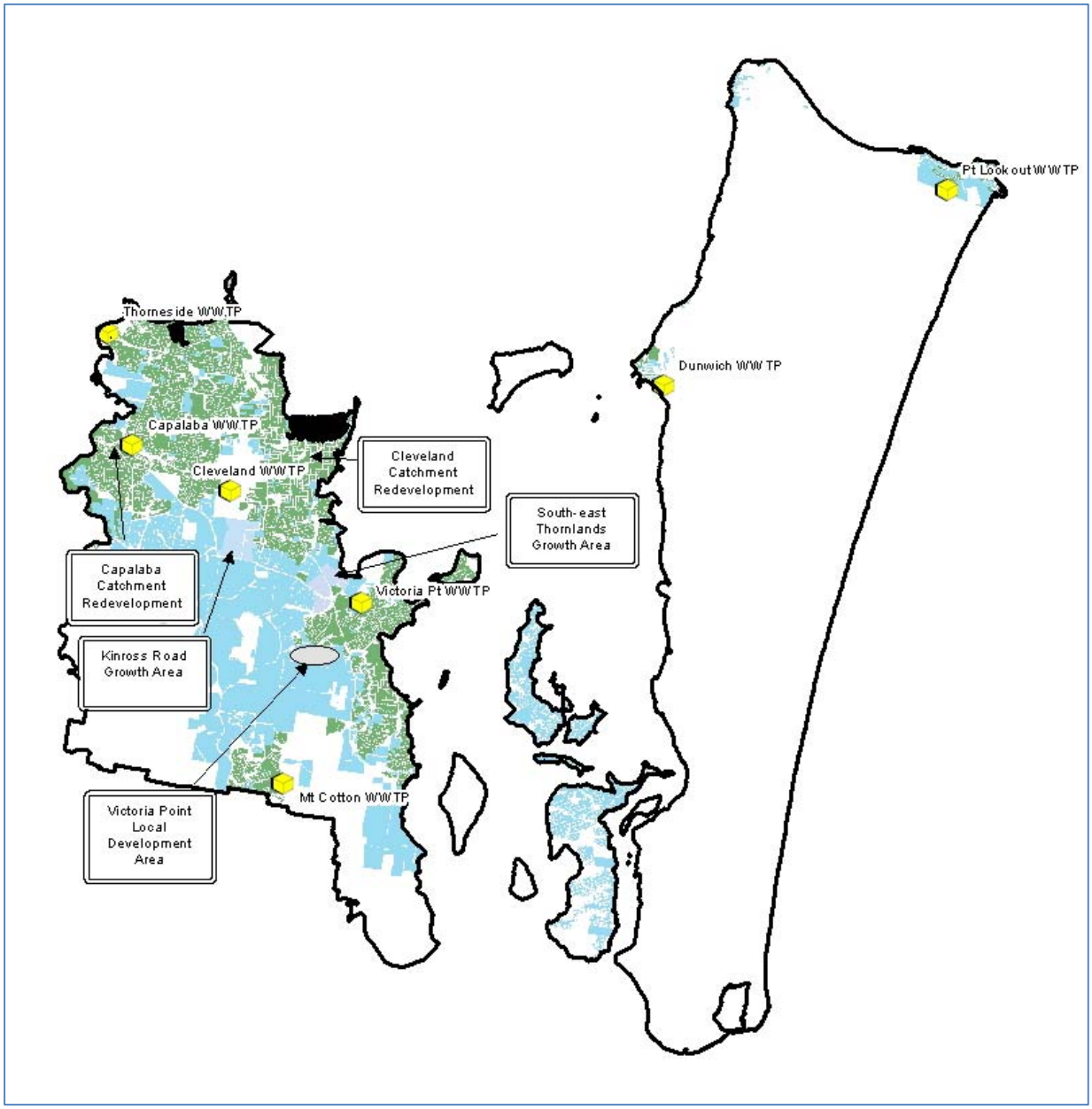
The following table outlines key areas of future development within the Redland local government area and the land use and infrastructure planning being undertaken in those areas. A map of these areas is provided below.

Table 7-1 – Key development areas

KEY DEVELOPMENT AREAS	LAND USE AND INFRASTRUCTURE PLANNING
South-east Thornlands growth area	A structure plan for this area has recently been approved which will see growth of approximately 1,458 dwellings. Development in the area will use spare capacity in the water supply network. Two trunk mains pass the frontage of the development, and developers in this area will be required to construct the reticulation utilising the mains. Wastewater from this area will be treated at the Cleveland WWTP. Trunk infrastructure leading to the Cleveland WWTP has sufficient capacity to service the development, however all pump stations and rising mains as well as any trunk gravity sewers will form part of an infrastructure agreement (IA) for this area.

KEY DEVELOPMENT AREAS	LAND USE AND INFRASTRUCTURE PLANNING
Kinross Road growth area	The state government declared this a master planned area in December 2010. RCC has now developed a structure plan for this area. RW has plans for the proposed networks required to service the area which have been captured in an IA with 2 developers signed in December 2010. The interaction of development in this area with Seqwater's operations between the Alexandra Hills reservoir complex and the Mount Cotton reservoir will require ongoing management, including revision of operating protocols and potentially some additional pipework inter-connection by Seqwater.
Capalaba & Cleveland catchment redevelopment	Areas of Capalaba and Cleveland have undergone significant redevelopment in recent years, mainly through the construction of residential unit blocks. There is scope in the *Redlands Planning Scheme* for this to continue. RCC has prepared master plans for this redevelopment.
Victoria Point	The Victoria Point local development area is contiguous with local services and can accommodate additional residential development subject to further investigation and amendments to the planning scheme.

Figure 7-1 Key development areas



7.2 Emerging land use planning issues

While the sections above detail growth areas where ultimate development extent, form and servicing strategy are relatively well understood, there are other issues in Redland City where RW is expecting to have input into decisions about future development extents, form and servicing strategy.

Two key issues are:

- wastewater collection and treatment for the Southern Moreton Bay Islands (SMBI); and
- North Stradbroke Island (NSI) land use planning investigations.

Wastewater collection and treatment for SMBIs

The SMBIs of Macleay, Perulpa, Lamb, Karragarra and Russell Islands have a costly infrastructure backlog for roads, sewerage and accessible transport services following their subdivision into small residential lots in the 1960s. Wastewater from these lots is treated through on-site systems such as septic tanks or on-site (on-lot) wastewater treatment plants. Regulation and compliance management of these systems is undertaken by RCC.

RCC has set down an action plan in its community plan for SMBI (December, 2011), in which goal 9.4 is to "investigate wastewater management options through: an economic and environmental feasibility investigation into providing an on-islands sewer network group systems for shared wastewater management across the islands as an interim or long term alternative to an on-islands sewer network".

Previous detailed planning studies into the provision of on-islands wastewater networks have determined that an on-islands wastewater network is not economically viable or prudent. RW will advocate for continued improvement of the management of septic tanks and on-site wastewater management systems as part of the long-term solution for wastewater management on the SMBIs.

NSI land use planning investigations

The Queensland Government has recently committed funding over 3 years to address land use planning issues on NSI arising from an Indigenous Land Use Agreement (ILUA) between the State and the Quandamooka People. The outcomes of these investigations may have implications for future service provision requirements on the island. When this work commences, RW will be an active stakeholder aligned with RCC desired outcomes at that time.

8. Redland Water's network planning

RW has undertaken master planning for its water supply and wastewater networks. These plans identify trunk and non-trunk infrastructure. Trunk infrastructure is higher order or shared infrastructure, which services a number of users. Table 8-1 identifies typical trunk infrastructure items within each of the RW networks.

Table 8-1 – Typical trunk infrastructure items

TRUNK NETWORK	ASSET CONFIGURATION
Water	Distribution mains: • Mainland and SMBI scheme: All mains ≥ 300mm diameter and specific mains of smaller diameter required to complete the interconnection of the trunk network; • NSI township schemes: Mains connecting water treatment plants to reservoir complexes or township boundaries, and mains connecting reservoir complexes and high level zones (either pump boosted zones or elevated reservoir zones). Reservoirs Associated pump stations and fittings Associated pressure reducing and sustaining valves Associated monitoring systems Associated disinfection systems Fire fighting devices
Wastewater	WWTPs Storage facilities Release systems Rising mains Gravity sewers generally ≥ 300mm diameter on the mainland and generally ≥ 225mm diameter on NSI Associated pump stations, manholes and fittings Odour and corrosion control systems Associated monitoring systems

RW has prepared trunk network plans that identify the existing and future trunk infrastructure required to service forecast growth. These trunk network plans have been prepared for its infrastructure networks based on a number of key inputs including:

- the demand for water and wastewater infrastructure generated by projected development in response to the land use provisions of the *Redlands Planning Scheme*; and
- the desired standard of service to be addressed by the network.

These inputs are elaborated upon as follows.

9. Planning assumptions

One of the key inputs to the planning of the RW networks is the demand for water and wastewater infrastructure generated by projected residential and non-residential development.

The projections of residential and non-residential development are referred to as the planning assumptions and have been prepared by RCC to provide a consistent basis for the planning of the following infrastructure networks:

- water;
- wastewater;
- stormwater;
- transport;
- parks and land for community facilities.

The planning assumptions prepared by RCC describe the type, scale, location and timing of future development and are based on the land use planning provisions of its planning scheme and the population and dwelling forecasts provided by the now Office of Economic and Statistical Research (OESR). In doing so, the outcomes desired by the *SEQ Regional Plan* and which are reflected in the planning scheme are given effect. To ensure this is the case, the planning assumptions must also be approved by the Minister as being compliant with the desired outcomes of the *SEQ Regional Plan*.

In terms of actual numbers in the forecasts, there are variations between ones used in the *SEQ Regional Plan* and OESR numbers used in the RCC priority infrastructure plan (PIP), which are due to the different parameters used and the level of detail in each agency in their analysis.

Use of the RCC planning assumptions for planning the water and wastewater networks will help to ensure that sufficient water is supplied to meet the needs of urban growth in accordance with the requirements of the regional plan.

The detailed planning assumptions are shown in RCC's PIP. The planning assumptions are also summarised in Table 9-1.

Table 9-1 – Planning assumptions summary

DESCRIPTION	DEVELOPMENT PROJECTIONS				
	2006	2011	2016	2021	ULTIMATE DEVELOPMENT
Population	132,972	148,878	164,772	172,166	180,851
Dwellings	49,797	56,850	63,894	67,330	71,454
Employees	32,095	36,394	40,335	43,918	50,009
Non-residential floor space (m^2 GFA)	1,423,560	1,614,240	1,789,042	1,947,964	2,209,074

9.1 Infrastructure demand

RW has converted the planning assumptions into demand for water and wastewater infrastructure where a premise is inside the area into which it is intended to extend the network. This typically

includes premises intended for urban development under the relevant local government's planning scheme.

The area into which RW plans to extend its networks is shown on the following maps:

- Appendix C – Water supply trunk network plans; and
- Appendix D – Wastewater trunk network plans

Demand for water and wastewater infrastructure is expressed in equivalent persons (EPs). An EP is defined as the average day (AD) water demand per person living in an average detached dwelling or the wastewater discharge per person living in an average detached dwelling. By definition – the relationship to average water consumption and/or average wastewater discharged, an EP is therefore not necessarily equal to a 'person' as defined in population projections.

The water demand projected for the area into which it is intended to extend the water network is summarised in **Table 9-2**. The wastewater demand projected for the area into which it is intended to extend the wastewater network is summarised in

Table 9-3. Note that there is a lower total number of wastewater demand (EPs) as not all areas serviced with water are provided a wastewater service.

Table 9-2 – Projected water demand

WATER SUPPLY ZONE	PROJECTED WATER DEMAND (EP)			
	2008	2013	2018	ULTIMATE DEVELOPMENT
Alexandra Hills	85,569	97,585	101,679	104,817
Heinemann Road	41,395	55,909	62,602	68,638
Mt Cotton	7,346	11,316	12,668	15,364
SMBI	7,865	15,730	21,180	21,573
Point Lookout	2,475	3,293	3,777	4,984
Amity Point	1,082	1,212	1,268	1,378
Dunwich	1,206	1,727	1,850	2,114
Total[4]	**146,938**	**186,772**	**205,024**	**218,869**

Table 9-3 – Projected wastewater demand

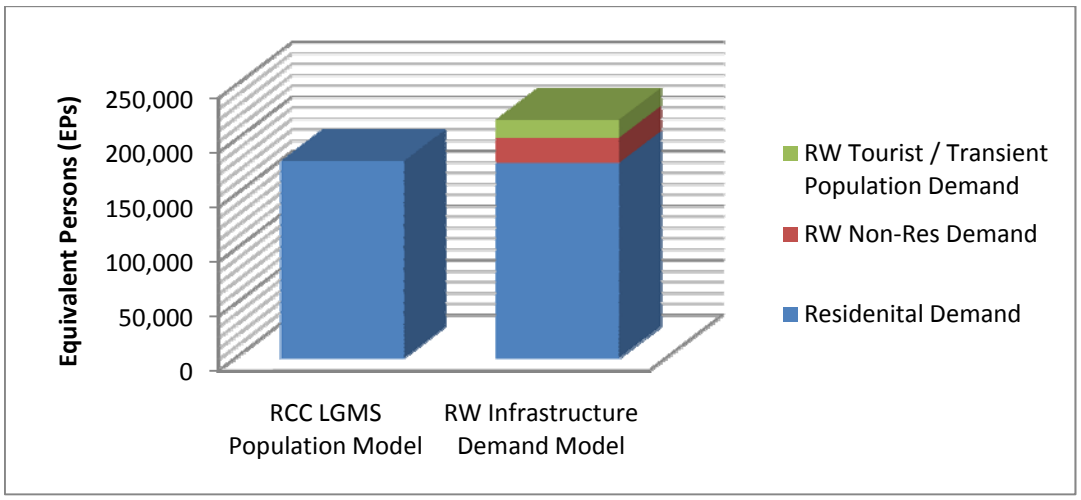
CATCHMENT	PROJECTED WASTEWATER DEMAND (EP)			
	2008	2013	2018	ULTIMATE DEVELOPMENT
Capalaba WWTP	26,652	27,350	28,114	29,662
Cleveland WWTP	32,063	36,272	39,787	46,644
Thorneside WWTP	40,930	43,347	45,452	47,572
Victoria Point WWTP	26,551	32,922	37,031	40,592

[4] Demand estimates include an allowance for tourist or transient population, especially on the islands of Redland City.

CATCHMENT	PROJECTED WASTEWATER DEMAND (EP)			
	2008	2013	2018	ULTIMATE DEVELOPMENT
Mt Cotton WWTP	3,029	3,703	4,600	5,520
Dunwich WWTP	641	1,425	1,574	1,864
Point Lookout WWTP	2,768	3,039	3,266	3,710
Total[5]	**132,634**	**148,058**	**159,824**	**175,564**

RW's alignment with the RCC population estimates is demonstrated in **Figure 9-1** which shows the ultimate population capacity as detailed in the RCC PIP, against the residential demand component of RW's infrastructure demand model. Note the inclusion of the non-residential demand and tourist of transient population demand contribution to the total demand for which RW caters.

Figure 9-1 - Alignment of demand projections



[5] Demand estimates include an allowance for tourist or transient population, especially on the islands of Redland City.

Redland Water's networks

RW operates 2 networks in Redland City as detailed in the following sections.

10. Existing water supply network

RW's existing water supply network comprises both trunk and non-trunk infrastructure extending from the connection points with the SEQ water grid through to the service connection and meter at each premise. Table 10-1 provides a summary of the water network as at 30 June 2012.

Table 10-1 – Summary of existing water network

INFRASTRUCTURE DESCRIPTION	AMOUNT
Water mains (km)	1,203
Water reservoirs (No.)	6
Water pump stations (No.)	7

The existing trunk water infrastructure is shown on Maps W2 to W8 in the RCC PIP, which can be found on the RCC website at:

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Pages/PIP-mapping.aspx

11. Existing wastewater network

RW's existing wastewater network includes both trunk and non-trunk infrastructure and includes WWTPs, pipes and wastewater pump stations. Table 11-1 provides a summary of the wastewater network as at 30 June 2012.

Table 11-1 – Summary of existing wastewater network

INFRASTRUCTURE DESCRIPTION	AMOUNT
Mains (km)	1,081
Pump stations (No.)	137
WWTPs (No.)	7

Table 11-2 provides a high-level overview of the WWTPs currently operating in the Redland local government area.

Table 11-2 – Summary of existing wastewater treatment plants

WASTEWATER TREATMENT PLANT	NOMINAL CAPACITY (EP)
Capalaba	30,000
Cleveland	38,000
Mt Cotton	6,400

WASTEWATER TREATMENT PLANT	NOMINAL CAPACITY (EP)
Thorneside	30,000
Victoria Point	34,000
Dunwich	1,000
Point Lookout	1,750
Total	**141,150**

The existing trunk wastewater infrastructure is shown on Maps S2 to S8 in the RCC PIP, which can be found on the RCC website at:

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Pages/PIP-mapping.aspx

Desired standards of service

The desired standard of service (DSS) is the standard of performance for an RW network stated in:

- for the water supply network, the *Water Supply Network Master Plan 2011* report (Redland Water, 2011);
- for the wastewater network, the *Desired Standards of Service Review - Sewerage* report (MWH, 2006).

The DSS are the technical criteria behind the design of RW's assets that allows RW to meet its customer service standards (CSS). In this respect, the DSS are not publicly reported in the same manner as our CSS are reported in our annual performance report.

This section summarises the key design criteria for the DSS for each of the RW networks.

The *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* requires all SEQ water service providers to develop a uniform code, the *SEQ Design and Construction Code*, for the planning, design and construction of new water and wastewater infrastructure. This code is currently being prepared and once adopted, will replace the existing DSS. The review of RW DSS and subsequent network modelling will be undertaken in line the creation of the new Redland City Council town plan (expected in 2015).

12. Water supply DSS

Table 12-1 states the key DSS for RW's water supply network.

Table 12-1 – Key desired standards of service for the water supply network

DESCRIPTION OF STANDARD	STANDARD
Average day demand	(for ultimate demand): 300 L/EP/day
Minimum operating pressure	22m at the property boundary
Maximum operating pressure	60m at the property boundary
Fire flow	<u>General urban category</u> a) Residential (3 storeys and below): 15L/s (2hrs) b) Residential (>3 storey buildings): 30L/s (4hrs) c) Commercial / Industrial: 30L/s (4hrs) <u>Small community category:</u> a) Residential (up to 2 storeys): 7.5L/s (2hrs) b) Commercial / Industrial (up to 2 storeys): 15L/s (4hrs) c) All other buildings: refer to the General Urban category. <u>Background demands:</u> a) Predominately residential areas: 2/3 peak hour b) Predominately commercial / industrial: localised peak hour plus check of 2/3 peak hour

DESCRIPTION OF STANDARD	STANDARD
Maximum velocity pipeline design	2.5m/s
Drinking water quality	Comply with National Health and Medical Research Council's *Australian Drinking Water Guidelines – 2004.*

13. Wastewater DSS

Table 13-1 identifies the key DSS for RW's wastewater network.

Table 13-1 – Key desired standards of service for the wastewater network

DESCRIPTION OF STANDARD	STANDARD
Average dry weather flow (ADWF)	250L/EP/day
Peak dry weather flow (PDWF)	2 x ADWF
Peak wet weather flow (PWWF)	5 x ADWF
Gravity main flow equation and friction factor	Mannings, 'n' 0.013
Rising main flow equation and friction factor	Hazen-Williams, main diameter ≤ 300 mm, C =110 main diameter > 300 mm, C =130
Minimum velocity at PDWF	Gravity main: 0.7m/s Rising main: 0.75m/s
Maximum velocity at PWWF	Gravity and rising mains: 2.5m/s

Redland Water's network upgrades

14. Future water supply infrastructure

RW has identified future trunk infrastructure required to supply the projected water demand at the DSS. This future trunk infrastructure is consistent with regional and strategic planning undertaken by Seqwater.

Tables and maps detailing the future trunk water supply infrastructure can be found in the RCC PIP, which can be found on the RCC website at:

- PIP document including schedule of works and mapping:
  - http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/V6.1_Documents/10%2000.pdf
- PIP maps showing plans for trunk infrastructure, on Maps W2 to W8 are also shown at:
  - http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Pages/PIP-mapping.aspx

15. Future wastewater infrastructure

RW has identified the future trunk wastewater infrastructure required to service the projected wastewater demand at the desired standard of service.

Tables and maps detailing the future trunk wastewater infrastructure can be found in the RCC PIP, which can be found on the RCC website at:

- PIP document including schedule of works and mapping:
  - http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/V6.1_Documents/10%2000.pdf
- PIP maps showing plans for trunk infrastructure, on Maps S2 to S8:
  - http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Pages/PIP-mapping.aspx

Demand management

Demand management involves behavioural and technological approaches and techniques that reduce water consumption and manage wastewater sources. Key areas include the following:

- **Economic** – user pays pricing structures provide financial incentives for residents and businesses to save water;
- **Education** – community, industry and school education programs raise awareness about the need to conserve water;
- **Enforcement** – use of regulatory mechanisms and water use restrictions combined with appropriate compliance and enforcement regime to target water misuse;
- **Encouragement** – incentive schemes and targeted marketing persuade the public to increase the uptake of water-saving products;
- **Engineering** – new ways of planning and managing water and wastewater infrastructure.

16. Community relationships

Education and awareness is essential to achieve the change in attitudes and behaviours needed to reach and maintain sustainability. By creating interesting and engaging programs to empower students, teachers, residents and local businesses, the community will discover and appreciate the importance of living sustainably with water. The following table outlines a number of community education activities being undertaken by RW.

Table 16-1 – Community education activities

EDUCATION ACTIVITIES	DESCRIPTION
Linking water locally education program	This program aims to influence long-term sustainable behavioural change regarding water use through education programs that address the following aspects of water and water usage: • local water as a valuable resource; • local sources of water; • using water wisely (urban demand management). Water education curriculum for early childhood, primary schools, and middle and secondary schools. The program offers all early childhood centres and primary schools in RW's region the opportunity for a classroom presentation.
Business education program	The purpose of this program is to educate the non-residential sector on how they can save water in the workplace, meet industry standards and current legislation requirements, as well as encourage staff and visitors to engage in sustainable water use practices in their place of business. The program highlights local industries demonstrating innovation and eco-efficient water management practices via the website and at industry seminars enabling them to share ideas with others in their industry sector. The program has developed a range of brochures, stickers and fact sheets to assist businesses with water efficiency.

EDUCATION ACTIVITIES	DESCRIPTION
Community education program	The purpose of this program is to deliver messages, to raise awareness throughout the community and identify the water-saving activities that can be easily undertaken by Redlands' residents. *National Water Week* is an excellent opportunity for increasing water awareness and is a key event. Redlands' Redfest/ Indigi (world environment day) and national water week are national events to distribute RW's key messages. Another education initiative is the recycled water training program. This program provides RW staff, recycled water private irrigators and tanker drivers with training on all aspects of workplace health & safety (WHS) practices when working with recycled water.

17. Residential programs

Residential programs are aimed at assisting residential customers to become aware of their consumption and provide awareness of acceptable wastewater disposal practices. Programs are designed to provide both short and long term benefits. Key initiatives and programs include:

- residential high water users program (refer to **24.4 Residential high water users program**);
- leak awareness program;
- advisory field service program;
- providing additional educational information for residential customers.

These programs are subject to the water security situation in SEQ.

18. Commercial programs

Commercial programs are aimed at supporting mandatory and voluntary campaigns that influence the behaviour and technology practiced by non-residential customers in delivering best practices in water conservation and sustainability in commercial and industrial environments. Programs are designed to provide both short and long term benefits. Key initiatives and programs include:

- in-house capabilities for providing water conservation audit and consulting services;
- enhanced customer relationship management for non-residential customers;
- research and identification of industry based 'best practice' and technology;
- ongoing contribution and collaboration with the State Government in policy decisions.

These programs are subject to the water security situation in SEQ.

19. Compliance

RW works closely with regulatory bodies to protect its infrastructure and ensure the community is aware of the current water-saving initiatives and regulations in the region. RW carries out investigations and audits around the following matters:

- permanent water conservation measures;
- theft of water;

- misuse of fire services;
- illegal water connections;
- damage to service providers' infrastructure;
- auditing of recycled water carriers;
- auditing of potable water carriers;
- illegal discharge to wastewater.

20. Wastewater source management

Wastewater source management concerns the quality of influent entering the WWTPs. Such influent includes sources from trade waste generators, illegal discharges, seawater infiltration, stormwater infiltration, domestic contributions, tankering operations and any other sources that may pose a risk to infrastructure and the environment.

RW's wastewater source management is based on the Water Services Association of Australia (WSAA) *National Wastewater Source Management Guidelines (WSMG) 2008* and RW's existing environmental management plan.

Connections policy

RW is responsible for the provision of water and wastewater services to customers throughout the Redland local government area. This connections policy outlines the process of connecting to, disconnecting from, or changing a connection to an RW network.

Connecting to, or changing a connection to an RW network typically involves the following processes:

- obtaining all necessary approvals for development from Council;
- making an application to RW for a service connection.

It is recommended that prior to making an application for development, early discussion with RW be initiated to determine the feasibility and cost of providing a service connection. Costs may include infrastructure charges, network contributions and network connection charges. This is particularly relevant where the development to be connected is located outside of the network's existing connection area.

Subsets of this connection policy are:

- POL-3054 Water Main Extensions Request from Resident;
- POL-3055 Provision of Wastewater House Connection;
- POL-3058 Wastewater Main Extensions for Commercial Properties and Multi-Unit Dwellings at Point Lookout;
- POL-3059 Wastewater Main Extensions Request from Resident.

These policies can be found at the RCC website:

http://www.redland.qld.gov.au/AboutCouncil/Policies/Pages/Policies.aspx

21. Redland Water's connection areas

RW is responsible for the provision of water and wastewater services to consumers throughout the Redland local government area via the following infrastructure networks:

- water supply network;
- wastewater network.

RW guarantees a connection to premises located in the existing connection area for a particular network (either water supply or wastewater), where it is technically feasible. Connection to a network is not guaranteed for any premises inside the future connection areas. The existing connection area for a network includes all premises which are levied a network service charge. Under the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009,* RW must review the existing connection area for each of its networks on an annual basis.

As well as the existing connection area expanding as new properties are connected to RW's networks, the connection areas will expand as planning progresses which identifies areas of the city that are able to connect to the wastewater network using a low pressure sewerage system – refer to **23.6 Application for low pressure sewer system connections and** disconnections.

The following sections outline the existing connection area for each RW network.

21.1 Water network

The connection areas for the water network are identified on the following maps in Appendix A – Water supply connection area maps:

Maps 1 to 5 inclusive – Water Supply connection areas:

Within the existing water connection area most premises are provided with the standard level of service.

21.2 Wastewater network

The connection areas for the wastewater network are shown on the following maps in Appendix B – Wastewater Connection area maps:

Maps 1 to 5 inclusive – Wastewater connection areas:

Within the existing wastewater connection area most premises are provided with a connection to the RW gravity collection system. For some areas within the connection areas, a low pressure sewer connection will be permitted. For more information regarding the policy for connection to the low pressure sewer system, please refer to Section 23 below.

22. Obtaining approvals for development

22.1 Development requiring approval

Where a development to be connected is not an existing lawful use, self-assessable or exempt development, necessary development, building and plumbing approvals will need to be obtained from RCC prior to making an application to RW for a service connection.

The following types of development require approval:

- reconfiguring a lot;
- material change of use;
- carrying out operational work;
- carrying out of building work;
- regulated plumbing or drainage works.

22.2 Typical development conditions imposed by Redland Water

RCC will coordinate with RW to obtain its written consent for the development as part of the assessment process. RW will assess the application having regard to potential impacts on the water and wastewater networks. This may result in RW requesting conditions be included on the development approval or compliance permit. These conditions may require infrastructure to be provided at the applicant's cost to enable the development to be connected to the network. Typical conditions include the following:

- applicant to provide new and upgraded infrastructure for the purpose of connecting the development to an RW network. This may include the provision of infrastructure external to the premises;
- applicant to pay all costs associated with providing infrastructure required to connect development to an RW network – subject to the requirements of the subset policies referred

to above. This includes additional costs associated with extending, upgrading or re-aligning an RW network;

- applicant to pay the cost of RW connecting the new and upgraded infrastructure to the live network;
- applicant to pay the cost of RW installing new service connections and meters to the premises;
- applicant to design and construct any water and wastewater infrastructure in accordance with RW's DSS and *SEQ Design and Construction Code*, and its design and construction standards;
- applicant to seek further approvals from RW such as trade waste approval where relevant.

In order to fulfil these conditions of approval, the applicant will, in most instances, need to make a subsequent application for a service connection(s).

23. Making an application for a service connection

Application can be made to RW to connect to or change a connection to an RW network for development that is:

- an existing lawful use;
- an exempt development; or
- a development having the necessary development, building and plumbing approvals.

Where an application to connect or change an existing connection to an RW network does not require the extension or upgrading of network infrastructure, the applicant will only be required to make application for a service connection. Most minor development within the relevant existing connection area will only require this type of application.

However, where an application to connect requires the applicant to extend or upgrade network infrastructure, an application will also need to be made to connect this extended or upgraded infrastructure to the live network. This is necessary to ensure the infrastructure complies with RW specifications.

Table 23-1 provides a summary of the application forms to connect development to the water and wastewater networks.

Table 23-1 – Redland Water application forms

SERVICE TYPE	APPLICATION FORM LINK
Water supply	http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/FCSRW004%20Water%20-%20Connection%20Relocation%20Disconnection.pdf
Wastewater	http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/CSRW005%20Waste%20Water%20connection.pdf
Discharge of trade waste	http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/CSRW003%20Trade%20Waste.pdf

23.1 General considerations

When considering an application for a service connection, regard will be had to any infrastructure agreement or conditions of development approval concerning infrastructure and whether that agreement or conditions of approval have been fulfilled. Regard will also be had to any outstanding infrastructure charges applicable to the premises.

A further important consideration for RW will be whether the premise is located inside or outside the existing connection area for that network. This concept is explained in the following subsections. The existing connection area for each network is identified in Section 21 of this *Water Netserv Plan*.

23.2 Premises inside the existing connection area

RW guarantees a service connection for premises within the existing connection area of that RW network, where it is technically feasible to be served. The process for making application for a service connection to each of the RW networks is discussed in the remainder of Section 23.

Subject to the provisions of RCC policies POL-3054, POL-3055, POL-3058 or POL-3059, the applicant will be required to pay all costs associated with the connection as part of the connection agreement.

For premises inside the wastewater network low pressure sewerage connection area, RW will allow a premise to connect a low pressure sewerage system to the existing gravity collection system.

23.3 Premises outside the existing connection area (including future connection areas)

RW may agree to a service connection for a premise located outside an RW network's existing connection area, including the future connection areas. The process for making an application is the same as that outlined in the remainder of Section 23, however in considering the application, RW will have regard to the following additional matters:

- the proximity of the premise to the RW network;
- the technical feasibility of providing a connection;
- the capacity of the RW network infrastructure to service the premise;
- any future RW infrastructure planned to be provided in that area and the timeframe for its provision.

If RW agrees to a service connection for the premises, and subject to the provisions of RCC policies POL-3054 (Water Main Extensions Request from Resident), POL-3055 (Provision of Wastewater House Connection), POL-3058 (Wastewater Main Extensions for Commercial Properties and Multi-Unit Dwellings at Point Lookout) or POL-3059 (Wastewater Main Extensions Request from Resident), the applicant will be required to pay all costs associated with the connection. This may include additional costs for the extension, upgrading and/or re-aligning of the RW network. Other matters may also be negotiated between the applicant and RW.

Where the premise is an existing lawful use outside the existing connection area and has not previously paid infrastructure charges or made an infrastructure contribution, RW may require a network contribution (infrastructure charge) to be made for the premise as part of the service connection charge.

23.4 Application for water connections and disconnections

Where a proposal does not involve the applicant extending, upgrading or re-aligning the water network, applications for connecting to, disconnecting from, or changing a connection to the water network can be made by lodging the relevant forms with RW – refer to **Table 23-1**. These forms are also available from Council's Customer Service team.

The applicant will be required to pay the cost of the connection upon lodgement of the application form. Information concerning the cost of the connection is provided in the "Redland Water's charges**"** section of this *Water Netserv Plan*. If RW agrees to a new service connection or a change to an existing service connection for the premise, the connection will be installed by RW in accordance with its DSS and the *SEQ Design and Construction Code.*

If a premise no longer requires a water connection, RW may agree to disconnect the existing service and remove the meter from the premise. Fixed water supply charges will still apply. A quotation for the disconnection may be obtained from RW by checking its fees and charges schedule or contacting Council's Customer Service team.

Where a proposal also involves the applicant extending, upgrading or re-aligning the water network, an application to RW for a connection of those works to the live network may also be required. The applicant will be required to pay the quoted costs for the connection upon lodgement of the application form (refer to **Table 23-1**). All infrastructure is to be constructed in accordance with RW's DSS and the *SEQ Design and Construction Code.*

23.5 Application for wastewater connections and disconnections

Where a proposal does not involve the applicant extending, upgrading or re-aligning the wastewater network, applications for connecting to, disconnecting from, or changing a connection to the wastewater network can be made by lodging a wastewater connection form with RW – refer **Table 23-1**. These forms are also available from Council's Customer Service team.

The applicant will be required to pay the cost of the connection upon lodgement of the application form. Information concerning the cost of the connection is provided in the "**Redland Water's** charges**"** section of this *Water Netserv Plan*. If RW agrees to a new service connection or a change to an existing service connection for the premise, the connection will be installed by RW in accordance with its DSS and the *SEQ Design and Construction Code.*

If a premise no longer requires a wastewater connection, the pipe connecting to RW's wastewater main must be disconnected. Property owners can request a quotation for RW to carry out this work by contacting RCC's Customer Service team. Fixed wastewater charges will still apply to the premise.

Where an application also involves the applicant extending or upgrading the wastewater network, an application for a connection of those works to the live network may also be required. The applicant will be required to pay the quoted costs for the connection upon lodgement of the application form.

23.6 Application for low pressure sewer system connections and disconnections

Where an application also involves the applicant extending or upgrading the wastewater network by connection of a property to the wastewater network by a low pressure sewer system, an application for a connection of those works to the live network including the provision of an approved discharge manhole plus the proposed low pressure sewer system extension will be required. The applicant will be required to pay the quoted costs (subject to the provisions of RCC policies POL-3055 (Provision of

Wastewater House Connection), POL-3058 (Wastewater Main Extensions for Commercial Properties and Multi-Unit Dwellings at Point Lookout) or POL-3059 (Wastewater Main Extensions Request from Resident), for the connection upon lodgement of the application form.

All infrastructure is to be constructed in accordance with RW's DSS and the *SEQ Design and Construction Code* – with particular reference to the low pressure sewer code Appendix G.

As part of the approval of the system, the applicant will need to gain RCC approval for the internal (inside property boundary) plumbing work. This approval will require submission of a 12-monthly audit program of the on-site infrastructure plus an annual call-out maintenance agreement.

If a premise no longer requires a wastewater connection, the pipe connecting to RW's wastewater main must be disconnected. Property owners can request a quotation for RW to carry out this work by contacting Council's Customer Service team. Fixed wastewater charges will still apply to the premise.

23.7 Filling stations

A permit to draw water in bulk from RW's water mains may be obtained by:

- *domestic water carriers* that operate potable water tankers for the delivery of water for domestic purposes. Domestic water carriers must be a registered business and hold a current permit to draw water under the *Food Act 2000* as well as a backflow certificate before they can obtain a permit. Domestic drinking water can only be obtained from an approved potable water filling location.

Permits will comprise a pre-paid swipe card for access to the authorised filling station locations. More details can be found on RCC's website or by contacting RCC's Customer Service team.

23.8 Metered standpipes

Under exceptional circumstances, metered standpipes may be hired to draw water in bulk directly from RW's water mains under the following conditions:

- *water users* use potable water directly from RW's water mains;
- *water users* must be a registered business;
- *water users* hold an approved RW permit;
- *water users* will require a backflow certificate for backflow protection.

Prior to applying for a metered standpipe, it is recommended that the applicant read RW's conditions which can be found at:

http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/CSRW003%20Trade%20Waste.pdf

This document is also available from RCC's Customer Service team.

Applications to hire a metered standpipe can be made by lodging a permit to draw water form with RW.

http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/CSRW007%20Permit%20to%20draw%20water.pdf

This form is also available from RCC's Customer Service team.

If the application is successful, RW will issue a permit to the applicant upon payment of the relevant hire rates and charges (see the "**Redland Water's charges**" section this *Water Netserv Plan*). RW

shall approve and control the access to customers for this purpose as well as ensuring its use will not have any detrimental effect on the water network or disadvantage other customers in any way.

23.9 Trade waste approvals

All businesses that generate trade waste and discharge it to the wastewater network must have a current trade waste approval from RW. Discharging waste to RW's wastewater network without approval is illegal and can incur penalties. The trade waste approval stipulates the conditions for discharging trade waste into the wastewater network. The approval is issued to the waste generator and property owner and is not transferable.

RW also operates a waste tracking program to monitor the regular removal and disposal of waste from grease traps and other industrial holding tanks. The trade waste approval granted by RW stipulates how often the grease trap must be cleaned out. Trade waste approval holders are issued with a docket book that must be given to the licensed liquid waste disposal contractor when the grease trap is emptied. These provide information back to RW to verify that the grease trap has been emptied and record the volume of waste that was disposed. All businesses that generate trade waste and discharge it to the wastewater network must have a current RW trade waste approval. Discharging waste to RW's wastewater network without approval is illegal and can incur penalties.

An application for a trade waste discharge approval can be made by lodging a discharge of trade waste form. Applicants must ensure that all development approvals (e.g. development application, plumbing and drainage approval etc.) have been obtained from RCC prior to lodging the application for approval to discharge trade waste with RW. The application form can be found at:

http://www.redland.qld.gov.au/FormsPermits/FormsDownload/Documents/Water/CSRW003%20Trade%20Waste.pdf

This form is also available from RCC's Customer Service team.

24. Conditions of use

Connection to the RW network is subject to a number of conditions concerning the conservation of water and the protection of RW's infrastructure. Customers are required to comply with these conditions. Penalties may be incurred if the conditions of use are not met.

24.1 Infrastructure construction standards

All infrastructure to be connected to RW networks is to be constructed in accordance with RW's DSS and the *SEQ Design and Construction Code*. The *SEQ Design and Construction Code*, is a uniform code for the planning, design and construction of new water and wastewater infrastructure across SEQ.

24.2 Water restrictions

In times of drought, water restrictions may be imposed across SEQ. RW residents and businesses are required to comply with any such restrictions that may come into force from time to time.

24.3 Permanent water conservation measures

The former QWC introduced permanent water conservation measures as of December 2009 for all SEQ council areas. Permanent water conservation guidelines for residents are as follows:

- existing gardens and lawns cannot be watered on Mondays or between 10am and 4pm on any other day as this is the hottest part of the day and the highest evaporation period;
- outside these hours, gardens and lawns can be watered using a bucket, watering can, hand-held trigger nozzle hose or an efficient sprinkler or efficient irrigation system;
- new gardens and lawns can be watered at any time on the day they are established;
- cleaning vehicles, buildings and equipment must be undertaken efficiently using a bucket, hand held trigger nozzle hose or a high pressure cleaner;
- town water cannot be used to clean paths and driveways, except where they are significantly dirty, or it poses a risk to health, safety or the environment;
- new swimming pools and spas can be filled with town water, but efficiency measures will continue to apply when topping up pools and spas;
- pets can be washed with a hand-held hose and town water can be used for drinking water;
- a hand-held hose, bucket or high pressure water cleaning unit can be used on residential construction sites;
- rainwater tanks cannot be filled or topped up with water from the tap or from a water tanker which has been filled using the town water supply (some exceptions apply).

These restrictions were lifted on 1 January 2013.

24.4 Residential high water users program[6]

RCC monitors high usage to help control domestic water consumption by issuing high consumption alert letters to Redland residents to help them monitor their consumption and alert households of leaks.

24.5 Water efficiency management plans

WEMPs assist businesses to:

- account for water use in a business or other non-residential premises;
- identify water-saving measures that can be readily applied to a business or other non-residential premises;
- prepare a plan for implementing the water-saving measures including timelines for their completion.

The requirement for a WEMP for large water using businesses was also lifted by the Queensland government on 1 January 2013.

24.7 Building near or over services

Protecting the integrity of the water and wastewater network, as well as being able to undertake repair and maintenance activities, is critical to our business operations. The *Queensland Development Code* called '*MP1.4 - Build Over or near relevant infrastructure*' came into force on 1 November 2013 and is intended to reduce the potential for adverse affects on our infrastructure.

In general RW requires:

[6] Information in Sections titled **24.4 Residential high water users** program and **24.5 Water efficiency management** plans is subject to change.

- building work near or over a water or wastewater main to not interfere with or adversely affect the function of the service or place any additional load on the service;
- adequate access must be provided to the mains for future maintenance;
- adequate access must be provided and maintained to access covers;
- adequate access must be provided and maintained to wastewater connection points.

24.8 Discharge of stormwater into the wastewater network

It is the property owner's responsibility to ensure that stormwater is not discharged into the wastewater network. This can cause flooding of the system during periods of rainfall leading to overflows of wastewater into properties further downstream. Possible sources of stormwater inflow can include:

- illegal connection of roof downpipes into the wastewater network (especially carports, patio covers and extensions added after the house was originally constructed);
- illegal connection of garden drains and "agi" pipes from behind retaining walls into the wastewater network;
- concreting, paving or turfing up to the level of the overflow relief gully (ORG) that allows stormwater runoff to enter the wastewater network;
- inadequate allotment drainage that leads to flooding of the allotment and inundation of the ORG during heavy rain.

RW regularly conducts smoke and dye testing in areas known to suffer from wet weather wastewater overflows.

24.9 Overflow relief gullies

An ORG is a drain-like fitting located outside the home, designed to release any wastewater overflow outside of the home in the event of a blockage in the wastewater main. If a blockage does occur, the ORG fitting should pop off to release the pressure and direct any wastewater away from the home.

The ORG must be installed at a level that is at least 150mm lower than the lowest drain inside the home, particularly the shower, toilet and any laundry or bathroom floor drains. The ORG must also be installed at least 75mm above the surrounding ground level to ensure stormwater does not flow into the wastewater network via the ORG. It is the property owner's responsibility to ensure that their home is fitted with a properly installed and operational ORG.

24.10 Wastewater reflux valves

A reflux valve is a one-way flap valve that is fitted to a property's private wastewater drainpipe to prevent any backflow from the wastewater mains due to overloading. RW's wastewater network is designed to cater for predicted normal wastewater flows, plus a margin for additional flow during wet weather conditions caused by stormwater finding its way into the system. Stormwater can enter the wastewater network via illegal connections, stormwater flooding over the top of manholes or infiltration of groundwater through cracks in the pipes.

RW installs reflux valves in properties that have experienced, or may experience problems with wastewater backing up from the mains and overflowing within the property during periods of heavy rain. If the wastewater main starts to back up, the flap valve will be pushed closed by the flow coming up the pipe to protect the property from an overflow.

It is important to note, however, that when the flap valve is pushed closed it cannot release any wastewater from the property until the back pressure has subsided. Occupiers of properties with reflux valves fitted must therefore avoid running showers, washing clothes or dishes, and flushing toilets during this period to prevent an overflow within the property. The installation of reflux valves is therefore a temporary measure to protect properties from wastewater overflows until RW can implement a long term solution.

Redland Water's charges

To provide its products and services, as well as to fund the development, operation, maintenance and replacement of infrastructure, RW collects the following charges from its customers:

- **residential and non-residential charges** are collected from customers within the existing connection areas (see the **Redland Water's connection areas** section of this *Water Netserv Plan*) regardless of whether they are physically connected to the network. These charges relate to the costs of providing the products and services, and for maintaining the networks;
- **connection charges** are collected from customers seeking a connection to, disconnection from, or a change to a connection to an RW network. These charges relate to the costs of constructing connection infrastructure between the existing network and the customer's property boundary. A connection charge may include a network contribution charge. This charge is collected from customers that seek connection of an existing lawful use located outside the existing connection area to either the water or wastewater network, and where no infrastructure charges have previously been collected for that development for the network;
- **infrastructure charges** are collected from customers undertaking development that creates an additional demand for water and wastewater infrastructure.

25. Residential charges

The following table outlines the charges to RW's residential customers.

Table 25-1 – Residential charges

COMPONENT	DESCRIPTION
Fixed water access charge	The fixed water access charge is levied on premises within the existing water connection area regardless of whether there is a physical connection to the water network. The charge is levied in advance and is a fixed price regardless of the volume of water consumed.
Water consumption charge	The water consumption charge is calculated on the number of kilolitres (1,000 litres) of water consumed and is based on a reading from the premise's water meter. Unlike the fixed water access charge, this charge is levied after the water is used, not in advance. The water consumption charge includes the cost of purchasing bulk water from the State Government's Seqwater and then delivering this water to customers.
Fixed wastewater access charge	The fixed wastewater service charge is levied on premises within the existing wastewater connection area regardless of whether there is a physical connection to the wastewater network. The charge is levied in advance and is a fixed price regardless of the volume of wastewater discharged.

The current service charges for residential customers, which apply until the end of the financial year, are detailed in RW's pricing fact sheets available from Council's Customer Service team or on the RCC website at:

http://www.redland.qld.gov.au/AboutCouncil/Budget/Documents/ScheduleOfFeesAndCharges2014-15.pdf; and

http://www.redland.qld.gov.au/AboutRedlands/FactSheets/Documents/Redland%20Water/FS506%20Residential%20Water%20and%20Wastewater%20Charges%202014-2015.pdf

http://www.redland.qld.gov.au/AboutRedlands/FactSheets/Documents/Redland%20Water/FS504%20Wastewater.pdf

RW will publish details of proposed charges for the next financial year in relevant newspapers and on the RCC website by 30 June. Fees and charges will be available on this page:

http://www.redland.qld.gov.au/EnvironmentWaste/Water/Pages/Redland-Water.aspx

26. Non-residential charges

The following table outlines the charges to RW's non-residential customers.

Table 26-1 – Non-residential charges

COMPONENT	DESCRIPTION
Fixed water access charge	The fixed water access charge is levied on premises within the existing water connection area regardless of whether there is a physical connection to the water network. The charge is levied in advance and is based on the size of the water meter (mm).
Water consumption charge	The water consumption charge is calculated on the number of kilolitres (1,000 litres) of water consumed and is based on a reading from the premise's water meter. Unlike the fixed water access charge, this charge is levied after the water is used, not in advance. The water consumption charge includes the cost of purchasing bulk water from the State Government's Seqwater and then delivering this water to customers.
Fixed wastewater access charge	The wastewater service charge is levied on premises within the existing wastewater connection area regardless of whether there is a physical connection to the wastewater network. The charge is levied in advance and is a fixed price regardless of the volume of wastewater discharged.
Wastewater pedestal charge	This charge is calculated based on the number of pedestals installed in each property.
Trade waste charge	This charge applies to customers that operate commercial premises, industry, trade or manufacturing businesses that discharge liquid waste to the wastewater network other than domestic wastewater. The charge will be calculated based on access, volume, strength and quantity considerations.
Metered standpipes	This charge applies to customers hiring metered standpipes. The metered standpipe charge comprises the following components: • monthly hire charge and security deposit; • water consumption charge.
Filling stations	This charge applies to customers using RW's designated filling stations. The charge comprises the following components: • annual permit fee; • regular top-up arrangement (similar to go-card).

The current service charges for non-residential customers are stated in RW's pricing fact sheets available from Council's Customer Service team or RCC website at:

http://www.redland.qld.gov.au/AboutRedlands/FactSheets/Documents/Redland%20Water/FS507%20Non%20Residential%20Water%20and%20Wastewater%20Charges%202014-2015.pdf

RW will publish details of proposed charges for the next financial year in relevant newspapers and on the RCC website by 30 June. Fees and charges will be available on this page:

http://www.redland.qld.gov.au/EnvironmentWaste/Water/Pages/Redland-Water.aspx

27. Rebates/remissions

RCC offers remissions in some situations as detailed below:

27.1 Remission for water leakage (concealed leaks)

RW is responsible for repairing leaks to the water mains up to and including the water meter which, in most cases, is located just inside the front boundary of the property. The property owner is responsible for repairing water leaks past the meter.

In cases where a concealed water leak has been found past the meter (within the property) and has been subsequently repaired by a licensed plumber, the property owner can lodge an application to RW to claim relief from the water consumption charges. The leakage relief is in the form of a partial refund of the charges. In all cases, the property owner is responsible for paying for the repairs.

Applications for leakage relief may only be lodged for leaks in the main supply pipe from the water meter to the building. Leaks found in internal plumbing, toilets, showers, hot water systems and swimming pools, in some cases, may be assessed on a case-by-case basis for water leakage rebates.

Please refer to RCC's policy on remissions for water leaks which can be found at:

http://www.redland.qld.gov.au/AboutCouncil/Policies/Documents/Concealed%20Leaks%20Policy%20-%20POL-2592.pdf

]27.2 Rebate for fire-fighting

The *Water Supply (Safety and Reliability) Act 2009* states that RW cannot charge for water used for fire-fighting purposes. In the event that water from a premise is used for fire-fighting purposes, the property owner can lodge an application in the form of a letter to RW for a rebate stating:

- name/s of the property owner/s;
- address of property owner/s;
- telephone numbers, home and work;
- real property description of the property for which the rebate is being claimed;
- address of property for which the rebate is being claimed;
- type of property, i.e. residential, commercial, industrial;
- details of the fire and its location;
- proof in accordance with RW's policy that a fire occurred such as:
  - written confirmation from the Fire Brigade;
  - a statutory declaration from the owner;
  - confirmation from an RW officer following a visual inspection;

- the type of installation from which the water was drawn, i.e. hose, fire hose, hydrant;
- the actual or estimated quantity of water that was used.

28. Connection charges

The section **Making an application for a service connection**, of this *Water Netserv Plan* outlines the process of connecting to, disconnecting from, or changing a connection to an RW network. For standard works such as short-side water connections, customers can refer to the following fees and charges schedule to determine the applicable cost.

http://www.redland.qld.gov.au/AboutCouncil/Budget/Documents/ScheduleOfFeesAndCharges2014-15.pdf

Alternatively, a quotation for these works may be obtained from RW by contacting Council's Customer Service team.

Where a customer seeks connection of an existing lawful use located outside an existing connection area to either the water or wastewater network, and no infrastructure charges or infrastructure contributions have previously been collected for that development for the network, the connection charge may also include a network contribution charge. A network contribution charge will be calculated having regard to the relevant adopted infrastructure charges resolution.

29. Infrastructure charges

RW may levy an infrastructure charge on any development that places additional demand on its water and wastewater networks. The amount of the charge levied must be in accordance with the relevant adopted infrastructure charges resolution. An adopted infrastructure charges resolution has been prepared for the Redland local government area. Further information regarding the adopted infrastructure charges resolution can be obtained from RCC's Customer Service team or RCC's website.

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Pages/Infrastructure-charges-2011.aspx

Redland Water's performance reporting

In order to achieve effective outcomes for the provision of water and wastewater services, RW sets high service standards that are consistent with RCC's corporate vision and commitment to its community.

30. Annual performance plan

RW's RCC-approved annual performance plan details how we plan to meet our customers' needs. It covers issues such as:

- customer service standards (including maintenance and service level goals);
- customer advice; and
- stakeholder feedback.

31. Key performance indicators

Key performance indicators (KPIs) in RW's performance plan are directly related to the quality and capacity of its network. Actual performance against these standards is presented in RW's annual report and is regulated by the appropriate authority. Details of RW's performance can be found in the annual reports located at:

http://www.redland.qld.gov.au/AboutCouncil/AnnualReport/Pages/default.aspx

32. Customer contact standards

RW has developed a Customer Service Charter which outlines its commitments to its customers, community and environment. A copy of the Customer Service Charter can be found at:

http://www.redland.qld.gov.au/EnvironmentWaste/Water/Documents/8206-rw-customer-charter.pdf

RCC operates a specialised Customer Service team for handling enquiries, faults and complaints in a prompt, knowledgeable, consistent and friendly manner. Customers can contact them via phone, email and in writing. The Customer Service team operates between 8:30am and 5.00pm on normal business days.

Customers are able to report service faults or concerns in relation to the water and wastewater networks (water quality, wastewater odours, system leakages, environmental overflows etc.) to Council's Customer Service team at any time 24 hours per day, 7 days per week. Calls made after normal business hours on weekdays, as well as those made on weekends and public holidays, are automatically routed to RCC's 24-hour after hours service.

RW also maintains a website which contains comprehensive information in relation to all facets of the business, as well as various forms required to be completed by customers.

33. Customer complaints

Customer complaints may include the provision of negative feedback or an expression of dissatisfaction in relation to business dealings, policy decisions, actions undertaken or the failure to perform certain actions. A complaint is not the same as a request for service, a request for

information or an enquiry seeking clarification of an issue. Examples of matters that are not classified as complaints include:

- a request for service or assistance with clarification on a matter;
- an enquiry into the progress of a water meter connection;
- a request to take action on a leaking water pipe or any other service fault;
- an inquiry to seek clarification or further information about a bill.

When customers contact RW with a complaint, they can expect to:

- be treated with courtesy and respect;
- receive appropriate support where special needs are identified, e.g. interpreters etc;
- be provided with a reference number for any future enquiry or follow-up;
- be kept informed of the process and outcome;
- have their complaint and personal details kept confidential;
- have the matter investigated thoroughly and objectively;
- receive an outcome for resolution within 10 to 20 working days, depending on the complexity of the complaint.

RW's approach when dealing with complaints allows for fair and detailed consideration. RW handles complaints based on the seriousness/complexity of the complaint. This allows a review process to occur should a complainant not be satisfied with the result. Performance targets require > 90% of complaints to be resolved by RW within 20 days.

Redland Water's bills

This section of the *Water Netserv Plan* outlines the billing arrangements in relation to service charges, connection charges and infrastructure charges.

34. Services

The following table outlines the key components in relation to bills issued for service charges for residential and non-residential customers.

Table 34-1 – Key bill components

COMPONENT	DESCRIPTION
Meter reading	Meter readings are used to calculate consumption charges that appear on the RW bill. Water meters are read quarterly. This is undertaken on a rolling basis across the city. In most cases the water meter is located inside the property and RW's meter reader will enter the property to take the reading. If their officers cannot read the meter (e.g. locked gates, a dog, etc.), RW will contact the customer via a self-read card to obtain a reading. Where a reading cannot be obtained, an estimate of the property's water consumption will be applied. Estimates are based on the property's historical water consumption. Meter accuracy reduces with age or usage. If the water meter is found to have stopped or is damaged, an estimate of the property's water consumption may be applied based on historical consumption. RW runs a program of meter replacement that accounts for the age of the meters they own and operate. When a water meter is replaced, the final reading is recorded for billing prior to the new meter being installed.
Water summary details	The following details will appear on an RW summary that accompanies the RCC rates notice: • the date of issue; • the customer's postal address, account number and the address of the property to which the charges apply; • the date the water meter was read, or if an estimate was made, a clear statement that an estimate was made; • the amount the customer is required to pay; • the date by which the customer is required to pay; • RW's telephone contact details; • the daily rate of drinking water usage at an individually metered property for the current reading period, including a graph showing current drinking water usage, as well as usage over each period of the previous 12 months and a comparison of usage for the same period for the previous year; • state government bulk water kilolitre usage.
Bill frequency	RW's billing occurs on a quarterly basis. Redland customers receive their water and wastewater bill as part of their rates notice.
Bill payment	There are many methods for accepting payment, including by mail, direct debit, BPAY and by telephone. The specific payment options can be viewed on the RCC website.

COMPONENT	DESCRIPTION
Late bill payment	RW 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.
Payment arrangements	RW recognises some customers may experience financial hardship (often due to circumstances beyond their control) which could affect their ability to meet the payment terms for their water and wastewater accounts. RCC provides assistance to customers experiencing difficulty in paying their account by way of a payment arrangement. A customer's eligibility to receive assistance under these provisions is contained within the current RCC hardship policies: http://www.redland.qld.gov.au/AboutCouncil/Policies/Documents/Collection%20of%20Rates%20and%20Charges%20and%20other%20Revenues%20-%20POL-2801.pdf http://www.redland.qld.gov.au/AboutCouncil/Policies/Documents/Council%20Pensioner%20Rebate%20-%20POL-2557.pdf http://www.redland.qld.gov.au/AboutCouncil/Policies/Documents/Exceptional%20Circumstance%20Waiver%20-%20POL-3114.pdf http://www.redland.qld.gov.au/AboutCouncil/Policies/Documents/Pensioner%20General%20Rate%20Deferral%20-%20POL-2556.pdf
Restriction of service	As a last resort, RW may restrict the water supply to a property when the property owner refuses to pay the required charges. By law, the water supply may be reduced to the minimum level required for the health and sanitation of the occupier but not completely shut off. We will not restrict your water supply: • without explaining alternative payment options; • without giving the chance to get benefit or concessions; • if there is a dispute about the amount owing; • if the customer is a tenant and the landlord is responsible for the debt; • if the customer has proven financial hardship; • if the customer needs water for a life support machine or other special needs; • if the restriction will cause a health hazard having taken into consideration any customer concerns. Resumption of unrestricted supply will be prompt when the reason for the restriction no longer applies.

Additional information concerning the following items can be obtained by contacting RCC's Customer Service team or can be downloaded from RCC's website:

- special meter readings;
- sub-metering of multi-unit developments;
- meter accuracy testing;
- water consumption advice notices;
- fee for service items, such as:
  - water and wastewater laboratory testing services;

- private works (installation and maintenance services).

35. Trade waste

Trade waste accounts are issued quarterly and include the base charge for the current financial year together with conveyance and treatment charges.

36. Metered standpipes and filling stations

A bond is required to be paid for short or long-term hire of a metered standpipe. Quarterly readings are obtained from the hirer. Metered standpipe hire and consumption charges are invoiced quarterly.

An annual permit fee is required for a filling station application. Potable water and recycled water consumption volumes are billed up front in order to issue an access card to tanker drivers. Potable water filling stations are located in 2 separate areas across the city and recycled water from a designated WWTP.

37. Connections

RW will provide a written quotation for connections to, disconnections from, or changes to a connection to an RW network. The applicant will be required to pay all charges associated with the connection including any network contribution charge prior to RW scheduling the works.

38. Infrastructure charges

Infrastructure charges may only be levied by giving a person an adopted infrastructure charges notice. RCC issues the infrastructure charges notice to the person with a development approval or compliance permit, inclusive of the charges for water and wastewater infrastructure.

Development assessment

Development assessment (DA) refers to the way RW receives, manages and decides development applications made under the *Sustainable Planning Act 2009*. This section of the *Water Netserv Plan* outlines how RW handles DA.

When this *Water Netserv Plan* comes into force, RW will maintain its delegation of DA functions to RCC's City Planning & Assessment Group. Close interaction between the assessment officers in the assessment teams and RW staff in both the planning and operational areas will be maintained through weekly application review meetings and constant involvement from RW staff in complex and large development applications.

This option provides better end results for the development applicants as legislated timeframes are more easily met and better coordination of essential service provision is maintained in developments approved in the RCC area.

The delegation of assessment tasks to RCC also extends to the calculating of infrastructure charges associated with trunk water and wastewater infrastructure provision. This enables efficient and accurate processing of all development responses under a "one-stop-shop" philosophy.

To summarise, the functions that RW as a water service provider delegates to RCC are:

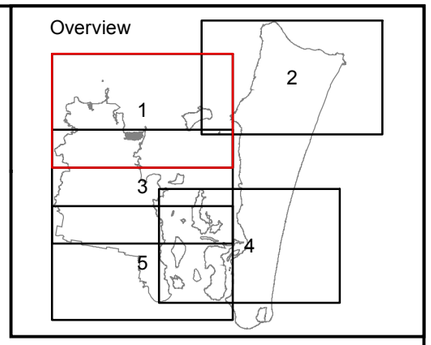
- DA receipting;
- information requests;
- DA decision making;
- negotiated decision requests;
- infrastructure charge notice preparation, collection and receipting;
- compliance inspections.

Appendices

Appendix A – Water supply connection area maps
Appendix B – Wastewater Connection area maps
Appendix C – Water supply trunk network plans
Appendix D – Wastewater trunk network plans

Appendix A – Water supply connection area maps

Water supply



THORNESIDE
WELLINGTON POINT
BIRKDALE
ORMISTON
ALEXANDRA HILLS
CLEVELAND
CAPALABA
THORNLANDS
PEEL ISLAND
DUNWICH
Rickertt Road
Quarry Road
Birkdale Road
Collingwood Road
Pitt Road
Main Road
Starkey Street
Old Cleveland Road East
Sturgeon Street
Allenby Road
Mcdonald Road
Old Cleveland Road
Moreton Bay Road
Finucane Road
Windemere Road
Shore Street West
Shore Street West
Passage Street
Long Street
Bloomfield Street
Wellington Street
Redland Bay Road
Ney Road
Vienna Road
South Street

Legend

- Property Boundaries
- Water Connection Area
- Future Water Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

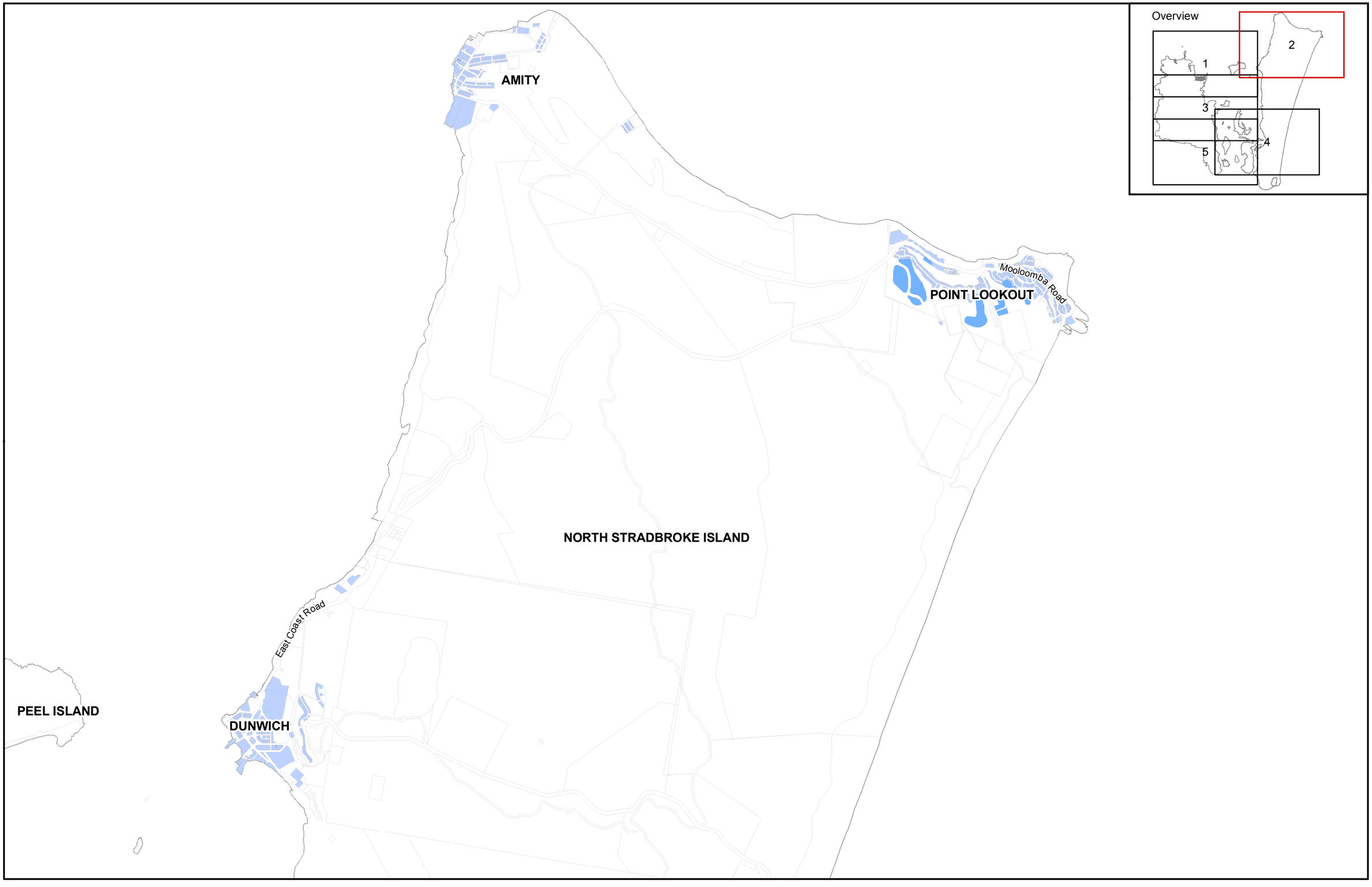
Map 1 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Water Supply Connection Areas

N W E S



Redland CITY COUNCIL

This map is approximate only and is intended to provide an indication of those premises included within the connection area. No warranty of any kind, express or implied including in relation to accuracy, completeness, correctness, currency or fitness for purpose is provided. Redland City Council takes no responsibility and accepts no liability for any loss, damage, costs or liability that may be incurred by any person acting in reliance on the information provided on the map.

The map should be used as a guide only for determining whether a premises is located within the connection area and should be confirmed with Redland City Council.

Legend

- Property Boundaries
- Water Connection Area
- Future Water Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 2 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Water Supply Connection Areas

N W E S

BIRKDALE
WELLINGTON POINT
ORMISTON
PEEL ISLAND
ALEXANDRA HILLS
CLEVELAND
CAPALABA
THORNLANDS
COOCHIEMUDLO ISLAND
SHELDON
VICTORIA POINT
MACLEAY ISLAND
MOUNT COTTON
REDLAND BAY
LAMB ISLAND
KARRAGARRA ISLAND
RUSSELL ISLAND

Old Cleveland Road
Moreton Bay Road
Finucane Road
Mcdonald Road
Shore Street West
Windermere Road
Passage Street
Long Street
Wellington Street
Bloomfield Street
Redland Bay Road
Vienna Road
South Street
Ney Road
Lyndon Road
Mount Cotton Road
Duncan Road
Panorama Drive
Boundary Road
Dinwoodie Road
Taylor Road
Woodlands Drive
Springacre Road
Point O'Halloran Road
Avalon Road
West Mount Cotton Road
Bunker Road
Benfer Road
Link Road
Colburn Avenue
Kate Street
Ford Road
Double Jump Road
Gordon Road
Boundary Street
Giles Road
Heinemann Road
Queen Street
German Church Road
Collins Street
Cleveland Redland Bay Road
Valley Way
High Central Road

Overview
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Redland CITY COUNCIL

Legend

- Property Boundaries
- Water Connection Area
- Future Water Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 3 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Water Supply Connection Areas

N
W E
S

VICTORIA POINT

MACLEAY ISLAND

LAMB ISLAND

KARRAGARRA ISLAND

NORTH STRADBROKE ISLAND

RUSSELL ISLAND

REDLAND BAY

Kate Street

High Central Road

Canaipa Road

Orchard Road

Overview

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Legend

- Property Boundaries
- Water Connection Area
- Future Water Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 4 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Water Supply Connection Areas

N W E S

SHELDON
MOUNT COTTON
VICTORIA POINT
REDLAND BAY
MACLEAY ISLAND
KARRAGARRA ISLAND
RUSSELL ISLAND
NORTH STRADBROKE ISLAND
Avalon Road
Mount Cotton Road
Heinemann Road
Giles Road
Double Jump Road
Boundary Street
Gordon Road
Queen Street
German Church Road
School Of Arts Road
Valley Way
Cleveland Redland Bay Road
Collins Street
Serpentine Creek Road
Orchard Road
Lagoon View Road
Longland Road
High Central Road
Canaipa Road

Overview
1
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Legend
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- Water Connection Area
- Future Water Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 5 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

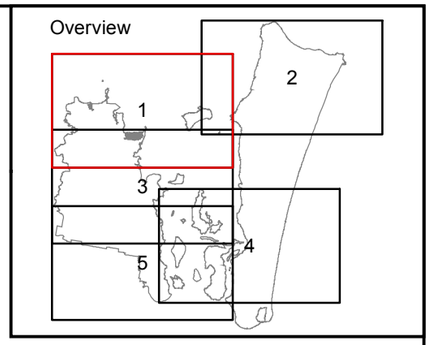
Redland WATER Water Netserv Plan

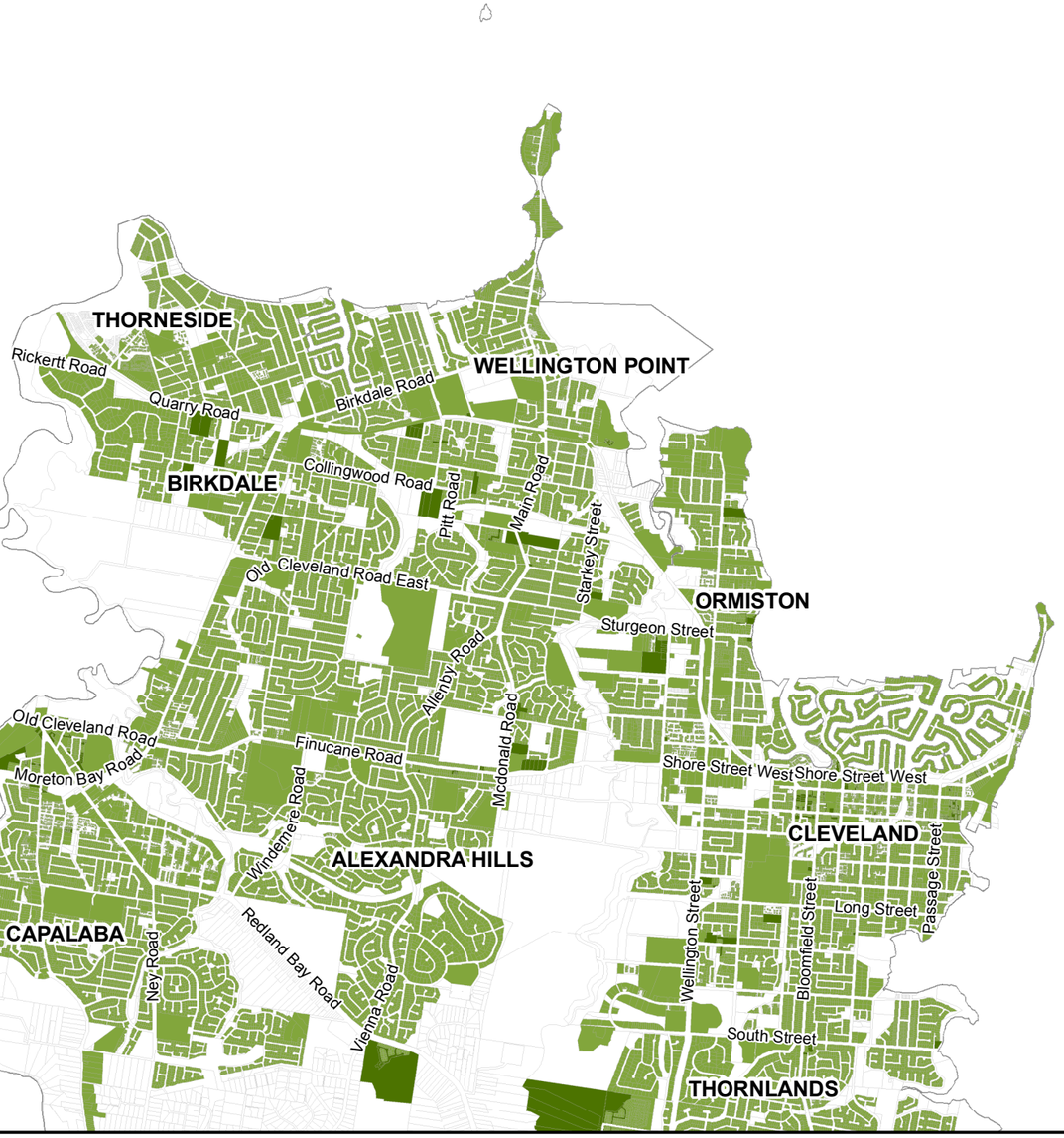
Water Supply Connection Areas

N W E S

Appendix B – Wastewater Connection area maps

Wastewater





Redland CITY COUNCIL

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Legend

- Property Boundaries
- Wastewater Connection Area
- Future Wastewater Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 1 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Wastewater Connection Areas

N W E S

Redland CITY COUNCIL

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Legend

- Property Boundaries
- Wastewater Connection Area
- Future Wastewater Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

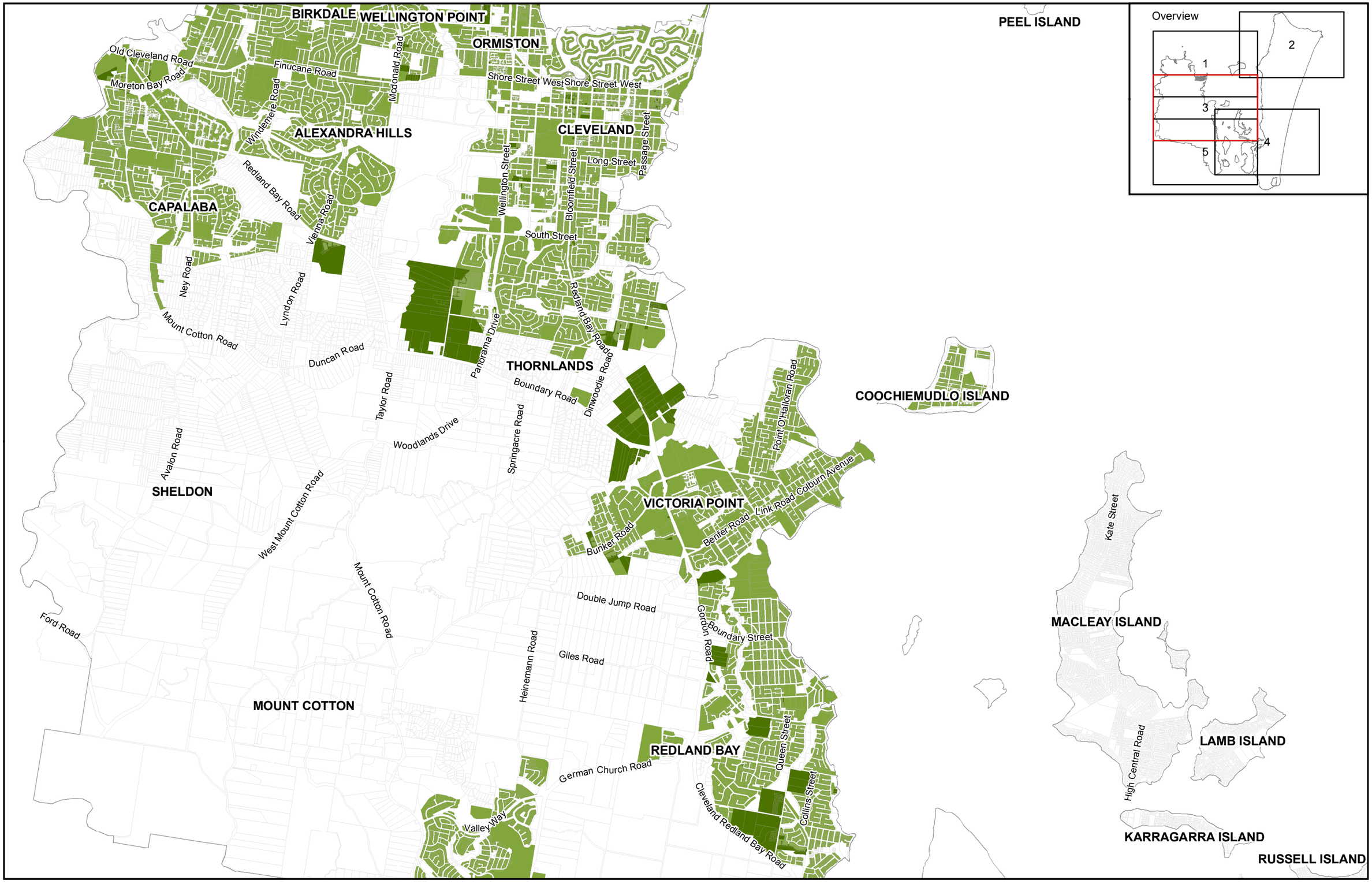
Map 2 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Wastewater Connection Areas

N W E S



Legend

- Property Boundaries
- Wastewater Connection Area
- Future Wastewater Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 3 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Wastewater Connection Areas

N W E S

VICTORIA POINT

Kate Street

MACLEAY ISLAND

LAMB ISLAND

High Central Road

KARRAGARRA ISLAND

NORTH STRADBROKE ISLAND

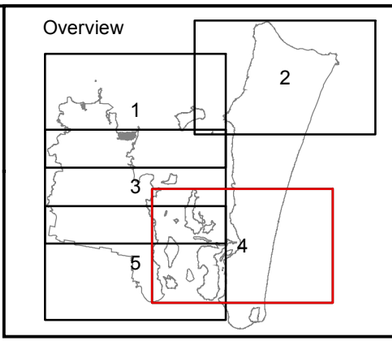
Canaipa Road

RUSSELL ISLAND

Orchard Road

REDLAND BAY

Overview



Redland CITY COUNCIL

Legend

- Property Boundaries
- Wastewater Connection Area
- Future Wastewater Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 4 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Wastewater Connection Areas

N W E S

SHELDON
MOUNT COTTON
VICTORIA POINT
REDLAND BAY
MACLEAY ISLAND
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Redland CITY COUNCIL

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Legend
- Property Boundaries
- Wastewater Connection Area
- Future Wastewater Connection Area

0 0.5 1 2 3 4 Kilometers

Scale: 1:60,000 @ A3

Map 5 of 5 Version: 1.0

Spatial Business Intelligence at Redland City Council 2014_08_J196_CP

Redland WATER Water Netserv Plan

Wastewater Connection Areas

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Appendix C – Water supply trunk network plans

Water supply

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W2-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W3-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W4-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W5-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W6-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W7-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/WaterNetwork-W8-12.pdf

Appendix D – Wastewater trunk network plans

Wastewater

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S2-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S3-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S4-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S5-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S6-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S7-12.pdf

http://www.redland.qld.gov.au/PlanningandBuilding/RPS/Documents/PIP/SewerNetwork-S8-12.pdf