# **Service Provider Performance Comparative Report - Queensland**

**Financial year 2014 - 2015** 

April 2016







This publication has been compiled by Water Supply Regulation Water Planning and Regulation, Department of Energy and Water Supply

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## **Summary**

This publication is the first comparative report released by the Department of Energy and Water Supply. The comparative report provides information on the performance of entities providing water and sewerage services (service providers) across Queensland and will be released annually. This first report is based on data submitted by 73 service providers against a set of key performance indicators (KPIs) for the 2014-15 financial year. The submission of data is mandatory under the *Water Supply (Safety and Reliability) Act 2008* (the Act) and data is collected on infrastructure, financial sustainability, customer service, water security and availability. The report aims to provide both service providers and their customer's information on how the provision of their water and sewerage services compares to other service providers around the State. Over time, this report will highlight the performance of individual service providers by benchmarking similar providers and support improvements in service provider performance and efficiency by continuing to provide transparent data.

As this is the first year of mandatory reporting, this report will provide a summary of water and sewerage services across Queensland, with a minimal number of comparisons. Over time, more detailed comparisons will be made, as the framework matures and the volume and accuracy of data becomes more reliable.

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#### 1 Introduction

This Queensland Service provider performance report 2014-2015 financial year presents data as reported by 73 service providers. The data is received under a regulatory framework that requires each service provider to report against specific Key Performance Indicators related to their service size and function. Data will be collected for each financial year and is required to be reported by 1 October immediately following the end of the financial year. It is the responsibility of each service provider to ensure the accuracy of the data provided. The regulatory requirements were introduced in 2014 and hence, this report is based on one (1) year of data for the 2014-15 financial year. Given this is the first year of reporting, this report will focus on providing a summary of water and sewerage services across Queensland, with a limited number of comparisons. To facilitate 'fair' comparisons, service providers have been grouped, according to their number of connections<sup>1</sup>, into three groups as detailed in section 2. Further work is currently being undertaken by the Department to group similar service providers using more than just connection numbers as a basis. This will further improve the fairness of comparisons for future reports.

It should be noted when reading the content of this report that the data has not been audited and the responsibility for providing accurate data rests with individual service providers. Whilst the Department provided service providers with the opportunity to verify and amend data following the original submission, the data discussed in this report is presented as received.

The KPIs cover a range of general measures including length of mains, capacity of water treatment plants; volume of water sourced and produced; daily demand and number of connections. Other KPIs capture measures of water security (including capacity to meet demand and contingency supplies); finance and customer service standards.

## 2 Performance reporting regulatory framework

In Queensland, service providers are regulated under the *Water Supply (Safety and Reliability) Act 2008* (the Act); which compels service providers to ensure the delivery of safe and reliable water to customers. A thorough review of the Act in 2013 aimed at reducing red tape and regulatory burden, resulted in the removal of a number of provisions in the Act that required service providers to develop and implement

- Strategic Asset Management Plans
- System Leakage Management Plans
- Drought Management Plans
- Outdoor Water Conservation Plans

These planning requirements were replaced by a mandatory performance reporting framework. The framework was developed based on the National Performance Reporting framework and focusses on collecting data on:

- · Financial sustainability and viability
- Customer service standards
- · Water demand and availability

Using this data, the Department can then release information that details how a service provider compares with other service providers across the State and how the industry overall is managing particular aspects of service delivery and sustainability.

The performance reporting framework was introduced in to the Act in 2014. Consequently, service providers submitted their first performance report in October 2015 for the 2014-2015 financial year. It is this data upon which this comparative report is based.

<sup>&</sup>lt;sup>1</sup> Connection – generally – means a property service that supplies either water supply or sewerage services, or both, to premises

## 3 Queensland water service providers

In Queensland a large proportion of water and sewerage services are delivered by local government, with a small percentage of state or privately owned providers. The types of services provided include potable and non-potable water, recycled water and sewerage and local circumstances can influence which services are provided. A total of 76 service providers were required to report against the KPI's but only 73 service providers submitted the performance reports.

The following service providers did not report their data or submitted data too late for it to be adequately considered in this report:

- Doomadgee Aboriginal Shire Council;
- Mornington Shire Council; and
- Napranum Aboriginal Shire Council.

These 73 providers manage 261 individual potable water schemes, 48 non-potable water schemes and 189 sewerage schemes.

There are many factors and challenges that impact service providers and influence their operations and service delivery. Some of these factors are unable to be controlled by the service provider and must be taken into account when considering the content of this report.

The challenges faced by service providers include remoteness, climate, weather patterns, access to skilled and experienced staff, population growth and contraction, constrained capital and in some cases, limited opportunities for economies of scale. These challenges can have significant impacts on the performance of different service providers across a range of indicators. For example, the provision of reasonably priced and good quality drinking water is the aim for all providers, however, this can be more difficult and costly for small and/or remote providers or providers whose water sources are constrained.

For the purposes of comparing data in this report, service providers have been divided into three groups, based on connections alone. Further work is being undertaken to establish groups based on a broader set of characteristics. These newly established groups will enable more appropriate comparisons to be undertaken for future comparative reports.

Table 1: service providers with potable water connections

Connections	Service Providers		
	Aurizon Operations Limited	Kowanyama Aboriginal Shire Council	
	Aurukun Shire Council	Lockhart River Aboriginal Shire Council	
	Barcoo Shire Council	Mapoon Aboriginal Shire Council	
	Blackall-Tambo Regional Council	McKinlay Shire Council	
		Northern Peninsula Area Regional	
	Boulia Shire Council	Council	
	Bulloo Shire Council	Palm Island Aboriginal Shire Council	
	Burke Shire Council	Paroo Shire Council	
Small: 1 to 1000 connections	Carpentaria Shire Council	Pormpuraaw Aboriginal Shire Council	
	Cherbourg Aboriginal Shire Council	Quilpie Shire Council	
	Cloncurry Shire Council	Richmond Shire Council	
	Cook Shire Council	Torres Shire Council	
	Croydon Shire Council	Winton Shire Council	
	Diamantina Shire Council	Woorabinda Aboriginal Shire Council	
	Etheridge Shire Council	Wujal Wujal Aboriginal Shire Council	
	Flinders Shire Council	Yarrabah Aboriginal Shire Council	
	Hope Vale Aboriginal Shire Council		

	Balonne Shire Council	Burdekin Shire Council
	Banana Shire Council	Central Highlands Regional Council
	Barcaldine Regional Council	Douglas Shire Council
	Charters Towers Regional Council	Isaac Regional Council
	Goondiwindi Regional Council	Mt Isa City Council
	Hinchinbrook Shire Council	South Burnett Regional Council
Madium: 4004 to 25000 connections	Longreach Regional Council	Southern Downs Regional Council
Medium: 1001 to 25000 connections	Maranoa Regional Council	Tablelands Regional Council
	Mareeba Shire Council	Western Downs Regional Council
	Murweh Shire Council	Cassowary Coast Regional Council
	North Burnett Regional Council	Gladstone Regional Council
	RTA Weipa Pty Ltd	Gympie Regional Council
	Torres Strait Island Regional Council	Livingstone Shire Council
		Whitsunday Regional Council
	Bundaberg Regional Council	Redlands City Council
	Cairns Regional Council	Rockhampton Regional Council
Large: greater than 25 000	Gold Coast City Council	Toowoomba Regional Council
connections	Logan City Council	Townsville City Council
	Mackay Regional Council	Unitywater
	QUU	Wide Bay Water

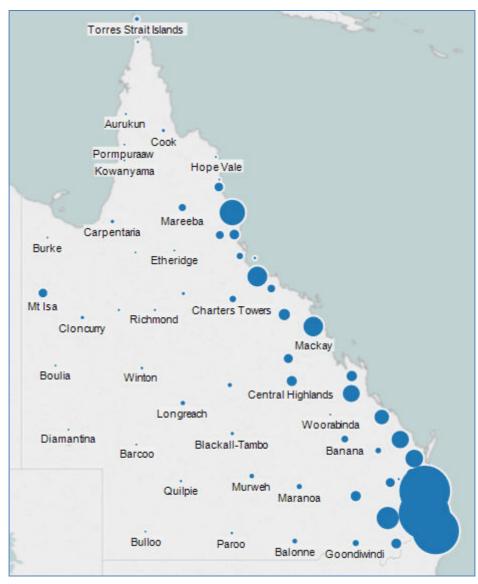


Figure 1Distribution of service providers across Queensland

# 4 Overview of Sewerage and Water Services

A number of KPI's in Series 1 'General', collect data on general service delivery in Queensland, including information on:

- infrastructure for providing water or sewerage services (treatment plants, available storage, pipework);
- volumes of water sourced by service providers (e.g. from rivers, dams, bores, desalination, recycled water);
- · numbers of properties serviced;
- · volumes of water supplied to properties.

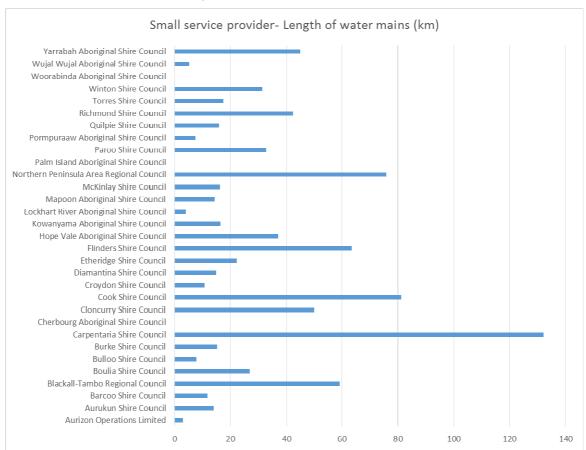
The data collected from Series 1 is also used in combination with other KPI's to consider financial sustainability and the overall capacity for the water service provider to supply sufficient water for the community's needs..

#### Sewerage service:

1. In Queensland 1 501 886 residential properties and 221 913 non-residential properties are serviced by approximately 216 sewerage treatment plants through 22 736 km of pipework.

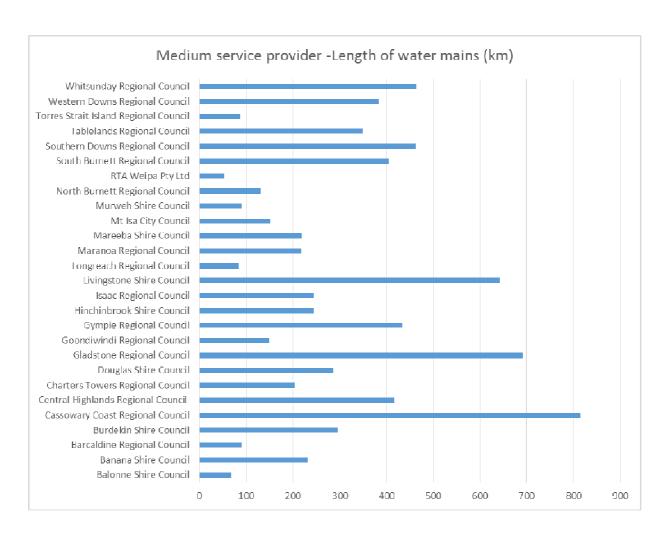
#### Water service:

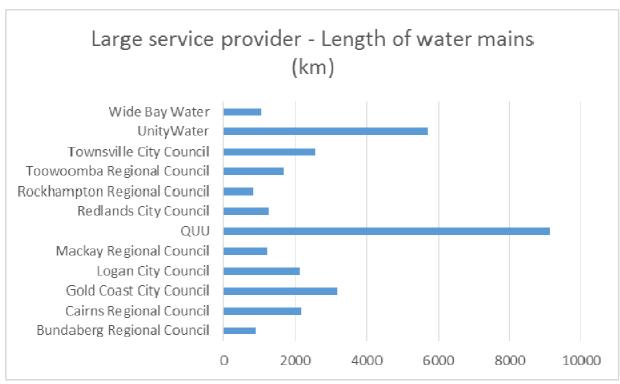
- 1. In Queensland, 563 362ML<sup>2</sup> of water is sourced from lakes, dams, rivers and other surface water supplies for potable and raw-partially treated schemes.
- 2. 52 674ML of water is sourced from bores, aquifers and other ground supplies for potable and raw-partially treated schemes.
- 3. 1432ML of water is sourced through desalination of marine water
- 4. 37 914ML of recycled water is supplied to properties from reported recycled water schemes
- 5. Water treatment plants across Queensland produce 564 074ML of drinking water
- 6. 350 946ML of water is supplied to residential properties and 175 505ML water is supplied to industry, commercial and other non-residential properties through 42 146 km of pipework for potable and raw-partially treated schemes.
- 7. 1715 519 residential properties are connected to a potable water schemes.
- 8. 48 656ML of water is deemed 'non-revenue water' (leakage within the system, firefighting, burst pipes, etc). This is approximately 10% of water supplied to residential and non-residential customers for potable water schemes.

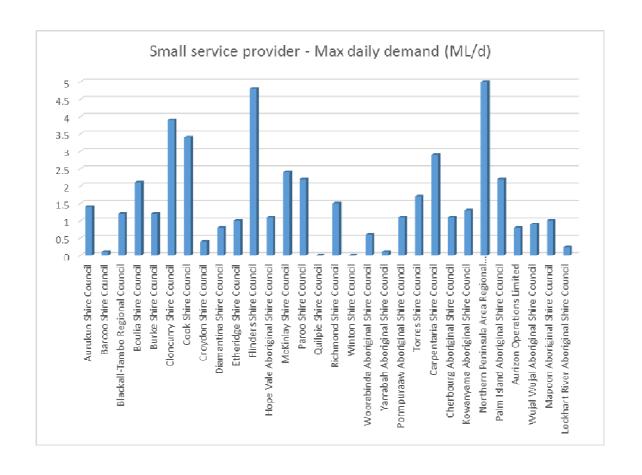


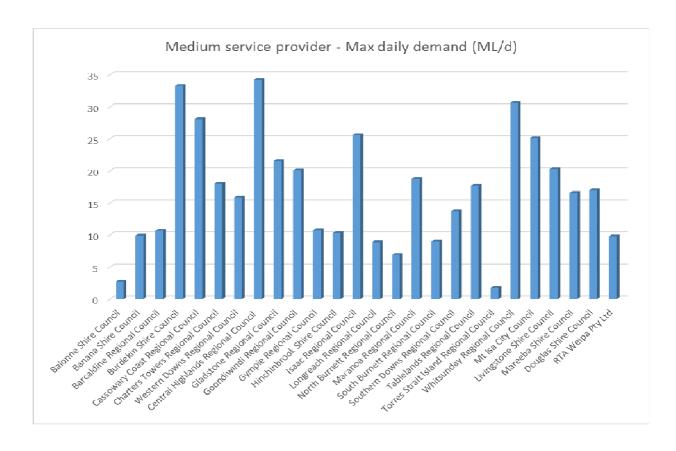
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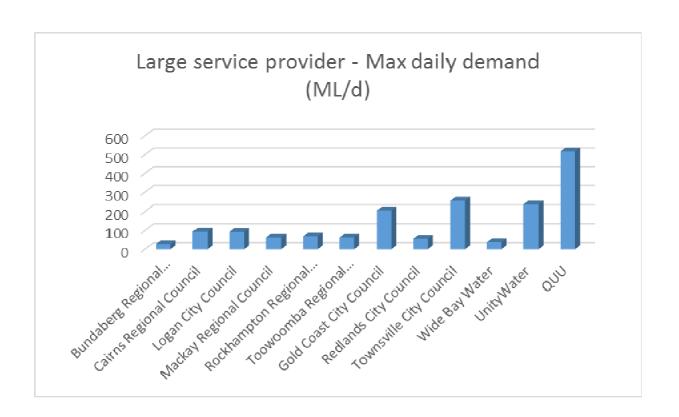
<sup>&</sup>lt;sup>2</sup> ML is 1,000,000 litres. An Olympic swimming pool holds 2.5ML of water.

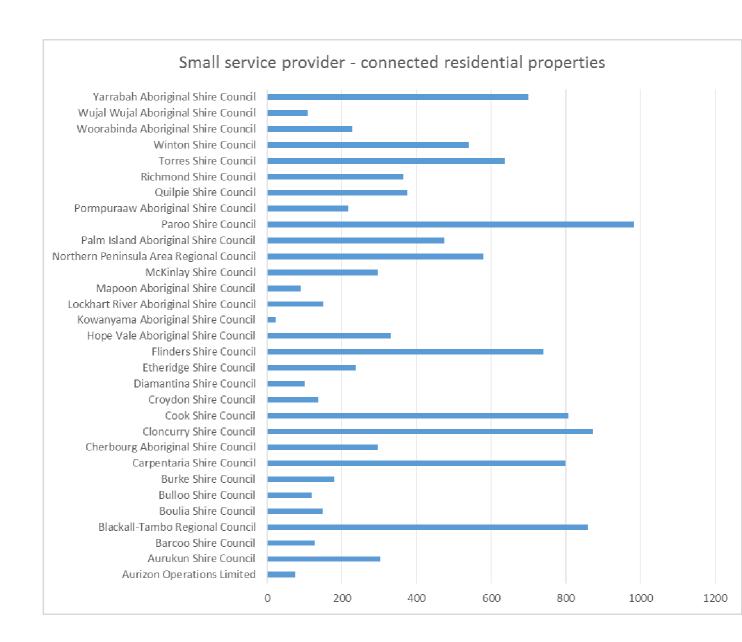


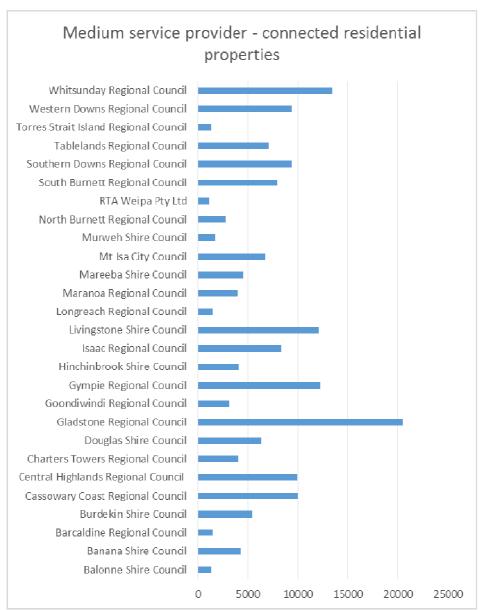


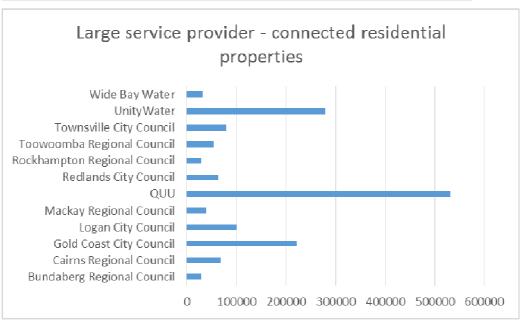












Water Service Providers (WSPs) are responsible for operating and maintaining their water and sewerage mains, the shortest water mains being reported as 100m at Oorindi (McKinlay Shire Council) and the longest being reported as 9112.5kmby Queensland Urban Utilities. Outside of South East Queensland, the longest length of water mains is reported as 2554km (Townsville City Council).

Across Queensland, a total of 617 468 ML of water was sourced from water sources (excluding recycled water) for potable and raw-partially treated schemes to supply homes and businesses, 564 074ML of which was water that had been treated for potable use. This is equivalent to the volume of 225 629 Olympic size swimming pools.



In South East Queensland, Seqwater is the bulk water provider, which sourced a total of 294,581 ML (49% of state total) from its various water supply sources, from which it produced 292,160 mega litres of potable water (52% of state total).

Seqwater has a treatment plant capacity of 1435.5 ML per day (46% of state total). 1198516 or 70% of Queensland's residential connections and 77 803 or 60% non-residential connections are supplied from the SEQ water grid.

A total of 41 545 km (which is the equivalent to driving from Brisbane to Cairns approximately 25 times) of water mains transported water to 1 715 519 residential and 128 509 non-residential water connections for potable water schemes. The data suggests the maximum daily demand for water across Queensland was 2219ML (equivalent to 887 Olympic size swimming pools).

## 4.1 Water demand and availability

The second series of key performance indicators provides data on water security and how the service providers ensure the customer's water supply for the short and long term. Given the climatic variability in Queensland, service providers must commit to long term planning to ensure the ongoing continuity of their supplies to customers. The water security KPI's provide provides valuable information, regarding water demand, water restrictions and water security both now and for the future.

Queensland's climate can vary greatly from one year to the next. For an extended period of time during the reporting year, over 80% of Queensland was drought declared, with some areas having experienced a number of years of failed wet seasons. Climate variability places continuing pressure on providers to guarantee water supplies for their customers. Service providers take responsibility for providing access to safe, secure and reliable water supplies and must therefore, ensure that their water sources can reliably provide a sufficient volume of water to meet anticipated demand, both now

and into the future, which includes identifying strategies and contingencies to manage restrictions and severe water shortages where necessary.

## 4.2 Water demand for next reporting year (QG 2.2)

181 out of reported 254 potable water schemes indicated that they are able to meet the water demand for the next reporting year. Croydon, Ilfracombe, Mulgildie and Northern Peninsula Area potable water schemes reported that they are unable to meet the water demand for the next reporting year. A response was not provided by water service providers for a total of 69 potable water schemes.

WSPs have contingency plans, for where demand starts to become greater than the ability to supply (due to depleting water supplies, little to no rainfall, unreliable supply). This may include an emergency water supply or the ability to switch between water sources (i.e. surface water and bore water). Further information can be found here Using water wisely

## 5 Water supply situation (QG 2.1)

The 73 service providers that reported against KPI's operate a total of 261 potable water supply schemes. Data was reported for 249 schemes and suggests that 226 of these schemes have 12 months or more supply available. Ten schemes were identified as having between six and twelve months of water supplies remaining and a further 13 reported having less than six months supplies remaining.

Additionally, Kowanyama, and Palm Island schemes were reported as having less than six months of water remaining and no available contingency supplies.

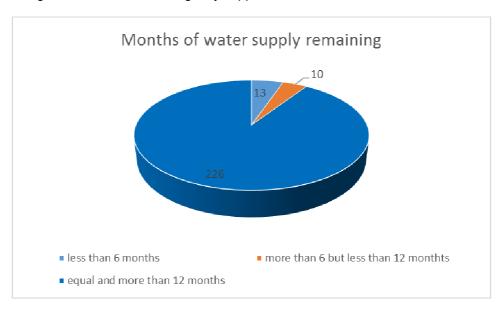


Figure 3 Months of water supply remaining in Queensland

## 5.1 Future water demand for next reporting year (QG 2.4)

Service providers reported data for 253 schemes for the KPI's looking at total anticipated demand for the next reporting period. Overall, there is a 13% increase in demand estimated, rising from 584 686 ML to 661 563 ML for potable water schemes when looking at the estimated demand in five years' time from now

Small and medium water service providers have reported the majority of future water demand is growth – population and industrial / agricultural. Yarrabah Water and Julia Creek potable water schemes were reported as having an anticipated rise in water demand by 400% or greater. Mount Isa City Council's Mount Isa potable water scheme expects the water demand to increase by approximately three times in the next five years.

In larger communities, the expected rise in future water demand is more subdued. Toowoomba and Townsville have reported water demand growth greater than 10% across their schemes in the next five years, while Cairns has estimated water demand growth greater than 20% across their schemes.

The Queensland Bulk Water Supply Authority (trading as Seqwater) accounts for approximately half the total urban water demand within Queensland and are anticipating approximately 14% water demand growth (equivalent to approximately 43 000 ML) in the next five years.

#### 5.2 Capacity to meet future water demand in 5 years' time (QG 2.6)

Service providers reported data for 255 potable water schemes against KPI's looking at anticipated capacity to meet water demand five years from now. Data suggests that 245 of these schemes have sufficient capacity to meet their anticipated demand, Croydon, Ilfracombe, Mulgildie, Rocky Point, Evans Landing, Kowanyama, Northern Peninsula Area, Palm Island and Mapoon potable water (9) schemes have reported not having sufficient capacity and Lockhart River Aboriginal Shire Council did not provide a response.

Of these 9 schemes, seven have a planned supply system response in place to accommodate the anticipated rise in water demand. The remaining two schemes, Kowanyama and Palm Island, reported not having sufficient capacity to meet anticipated demand in five years' time and not having a planned supply system response in place.

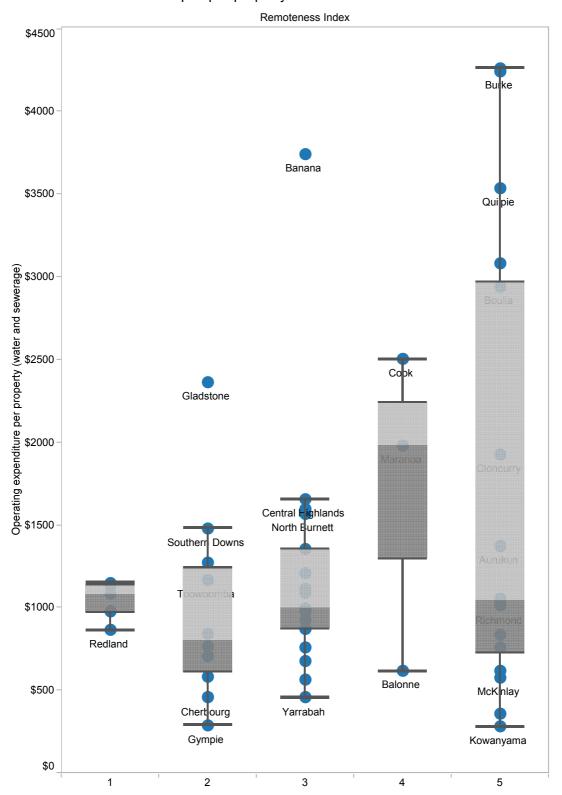
#### 5.3 Water restrictions

Water restrictions play an important role in managing water demand. 41% of service providers reported having water restrictions in place during the reporting period. Restrictions ranged from limiting outdoor water use to imposing water usage limits. Of the 9 schemes reported as having insufficient capacity to meet future demand, 6 have reported having water restrictions in place

## 5.4 Financial sustainability

The third series of key performance indicators provides data on service provider financial sustainability for water and sewerage services. Ideally, service providers should aim, at a minimum, to achieve cost recovery for their services. Service providers do however face a number of challenges in delivering affordable water and sewerage services to their customers, whilst ensuring appropriate operation and maintenance of their systems. It must be recognised that the economies of scale for some providers, particularly those in remote locations or supplying very small schemes, are such that cost recovery may never be achieved.

#### Opex per property vs remoteness



Sum of Opex/prop (w&s) for each Remoteness Index. The marks are labeled by Council. The view is filtered on Remoteness Index, Exclusions (Council,Remoteness Index) and sum of Opex/prop (w&s). The Remoteness Index filter keeps 1, 2, 3, 4 and 5. The Exclusions (Council,Remoteness Index) filter keeps 67 members. The sum of

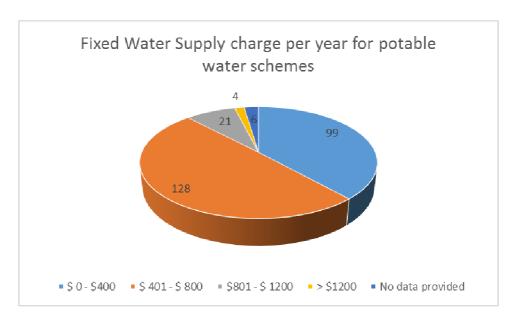
#### 5.5 Customers

The forth series of key performance indicators provides data on water and sewerage charging and customer standards. Data is collected on KPI's for billing, mains breaks, incident response times, interruptions and customer complaints. Most service providers in Queensland, outside of South East Queensland, are required to develop a customer service standard that sets minimum standards for activities, such as response time for incidents and interruptions, the number of expected mains breaks and the like. Customer service standards (CSS) must be developed in consultation with customers, reviewed every 5 years and placed on the service provider's website. Data reported for customer service standard KPI's facilitate a comparison with each service provider's CSS to establish if they have met the standards they have set. A number of CSS KPI's also provide information on the status of the infrastructure supplying services. For example, a high number of mains breaks over a number of reporting years may indicate that the infrastructure is ageing and should be replaced. Each service provider in Queensland has their own charging arrangements in place for the services they provide. Some service providers have only fixed charge arrangements, while others have a Two Part Tariff consisting of fixed and usage charges. Factors that influence how services are charged and the amount that is charge include:

- The types of services provided e.g. sewerage and water or just sewerage or just water services;
- The cost of operation and maintenance of the water and sewerage assets;
- · Usage or consumption;
- Bulk water charges;
- Location and size of the scheme (e.g. how many properties are serviced and where are they located);
- Type of water and wastewater treatment utilised; and
- The types of connections and how they are categorised, within the scheme.

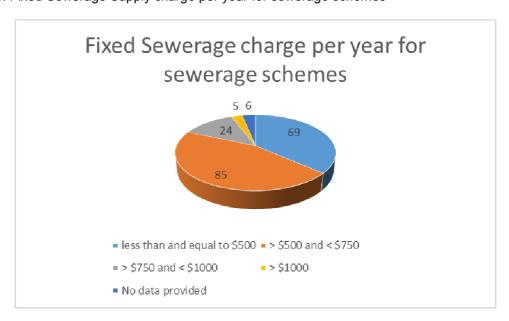
When looking at the information presented on water charges, it is important to remember that service providers which only use a fixed charge system are more likely to be in the higher cost portion of the graphs, as compared to those that use a two part tariff. The data reported for an annual and a typical bill is likely to provide a more accurate comparison.

Figure 4: Fixed Water Supply charge per year for potable water schemes



Reported data suggests that close to 88% of the potable water schemes in Queensland have fixed water charges of less than \$800 per year. Aurukun Shire Council has the highest fixed water charges per year at \$1,324, but, data was not received for 6 potable water schemes, namely, Bulloo Shire Council, Winton Shire Council, Woorabinda Aboriginal Shire Council, Pormpuraaw Aboriginal Shire Council, Mapoon Aboriginal Shire Council and Lockhart River Aboriginal Shire Council. This data also excludes bulk water service providers.

Figure 5: Fixed Sewerage Supply charge per year for sewerage schemes



For sewerage schemes, close to 81% sewerage schemes in Queensland have fixed sewerage charges of less than \$750 per year.

Fixed charges for sewerage services for 24 schemes is between \$750 and \$1,000 per year and 5 schemes charge greater than \$1,000 per year. Aurukun Shire Council has the highest Fixed Sewerage Charges per year i.e. \$1,519, but no data was reported for 6 schemes operated by the following service providers.

Bulloo Shire Council (Thargomindah Sewerage) Winton Shire Council (Winton Sewerage)

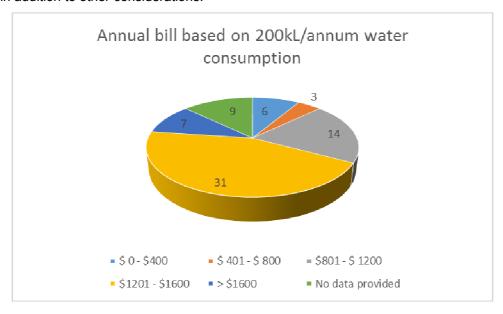
Pormpuraaw Aboriginal Shire Council Northern Peninsula Area Regional Council (Pormpuraaw)

Mapoon Aboriginal Shire Council (Mapoon)

Lockhart River Aboriginal Shire Council (Lockhart River)

#### 5.5.1 Annual Water and Sewerage Bill

As mentioned above, the information reported by service providers for "Annual Bill based on 200KL/annum" and "Typical Residential Bill" KPI's varies depending on the whether the service provider provides both water and sewerage services to their customers OR only provides a water service, in addition to other considerations.



Typical residential annual water and sewerage bill

8
8
12
14
28
\* less than \$800 \* \$800 - \$1200 \* \$1201 - \$1600 \* > \$1600 \* No data provided

The typical residential bill demonstrates the actual amount that customers pay for their water and/or sewerage services, while the 200kL annual bill attempts to 'standardise' billing information to allow for comparisons across service providers, given the variability in charging structures.

Data suggests that 31% of service providers' annual bill for 200kL is \$1200.

Unfortunately, almost 11% of the service providers did not provide information on billing, including the following service providers.

Bulloo Shire Council

Woorabinda Aboriginal Shire Council

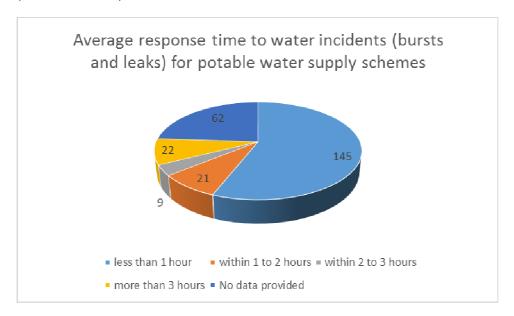
Pormpuraaw Aboriginal Shire Council

Northern Peninsula Area Regional Council Palm Island Aboriginal Shire Council

Mapoon Aboriginal Shire Council Lockhart River Aboriginal Shire Council

#### 5.5.2 Customer Service

One of the key performance indicators provides data on "Average Response time for water incidents (bursts and leaks)".



Of the 197 schemes for which data was reported, for 145 of these schemes (73%) it takes less than 1 hour for the service provider to respond to a water incident. There are 22 schemes where the response time is greater than 3 hours. There are 62 schemes for which no data was received from the service provider.

# 6 Wrap up

As a general comment the Regulator has noted that for a number of service providers interpreting some of the Queensland Government performance indicators proved difficult. In response to this issue the Regulator has set up a Performance Reporting Steering Committee. The committee is made up of representatives of the Department of Energy and Water Supply, Qldwater and the following service providers.

Seqwater Barcoo Shire Council

Charters Towers Regional Council Gold Coast Regional Council

Cairns Regional Council Mount Isa Regional Council

Gympie Regional Council Mackay Regional Council

Townsville Regional Council Queensland Urban Utilities

The goal of the steering committee to facilitate better understanding of Queensland Government key performance indicators and address any anomalies between the National Performance Reporting Indicators and Queensland Government performance indicators.

It is hoped that the outcomes achieved by the steering committee will significantly reduce the time and effort needed by all service provider to produce and submit their required data and also, improve the quality and reliability of that data.