

# ANNUAL RECYCLED WATER PERFORMANCE REPORT

*July 2015 - June 2016*



**Unitywater**

Serving you today,  
investing in tomorrow.

# Contents

Introduction .....	3
Classes of Recycled Water .....	4
Recycled Water Scheme General Information .....	5
Units Of Measurement Definitions .....	6
Brendale Sewage Treatment Plant .....	7
Coolum Sewage Treatment Plant.....	8
Kawana Sewage Treatment Plant.....	9
Landsborough Sewage Treatment Plant.....	10
Maleny Sewage Treatment Plant .....	11
Maroochydore Sewage Treatment Plant.....	12
Murrumba Downs Sewage Treatment Plant .....	13
Nambour Sewage Treatment Plant .....	14
Noosa Sewage Treatment Plant.....	15
Redcliffe Sewage Treatment Plant.....	16
Woodford Sewage Treatment Plant.....	17
South Caboolture recycled water network .....	18

# Introduction

Recycled water is supplied for customer reuse throughout the Unitywater supply region. Customers may use recycled water for a number of approved residential, commercial, municipal and industrial purposes.

Unitywater monitors the water quality of each recycled water scheme. This performance summary of monitoring results is provided to assist our customers to manage their onsite activities.

If you have any further questions regarding recycled water, please visit [www.unitywater.com/Recycled-Water](http://www.unitywater.com/Recycled-Water)

12

SCHEMES SUPPLYING RECYCLED WATER

96

KM OF RECYCLED WATER MAINS

A+, A, B, C, D

CLASSES SUPPLIED

29

FIXED SITE COMMERCIAL, INDUSTRIAL AND MUNICIPAL CUSTOMERS

158

TANKER CARRIER CUSTOMERS

1,006

RESIDENTIAL CUSTOMERS

# Approved uses of recycled water

Unitywater supplies five classes of recycled water: Class A+, Class A, Class B, Class C and Class D.

Each class is of a different quality and is restricted to certain uses.

Below is a summary list of approved uses by classification.

For further information on approved uses, please visit [www.unitywater.com/Recycled-Water](http://www.unitywater.com/Recycled-Water)

Use	Class A+	Class A	Class B	Class C	Class D
Irrigation of residential gardens and lawns - above ground	✓	✗	✗	✗	✗
Irrigation of residential gardens and lawns - below ground	✓	✓	✗	✗	✗
Filling or topping up of residential 'non-drinking water' rainwater tanks is <b>NOT PERMITTED</b>	✗	✗	✗	✗	✗
Dust suppression, compaction	✓	✓	✓ <sup>a</sup>	✗	✗
Watering parks, playing fields, footpaths and roadside plants	✓	✓	✓ <sup>a</sup>	✓ <sup>a</sup>	✗
Filling fenced ponds, lagoons and dams (not used for recreational purposes)	✓	✓	✗	✗	✗
Filling non-fenced ponds, lagoons and dams (not used for recreational purposes)	✓	✗	✗	✗	✗
Road works	✓	✓	✓ <sup>a</sup>	✗	✗
Washing cars	✓	✗	✗	✗	✗
Washing animals (except pigs)	✓	✗	✗	✗	✗
Hydraulic testing of sewer infrastructure	✓	✓	✓	✓	✗
Irrigation of landscaping on construction sites	✓	✓	✓ <sup>a</sup>	✗	✗
Filling or topping up of swimming pools or spas <b>NOT ALLOWED</b>	✗	✗	✗	✗	✗
Irrigating sugar cane destined for non-edible purposes (fixed site users only)	✓	✓	✓	✓ <sup>a</sup>	✓ <sup>a</sup>
Irrigating turf (fixed site users only)	✓	✓	✓	✓ <sup>a</sup>	✓ <sup>a</sup>

✓ listed use is approved for this class of recycled water

✗ listed use not approved for this class of recycled water

<sup>a</sup> use is accepted only under strict site controls including site management plans

# Recycled water scheme general information

Scheme	Class Available Fixed-Site Customers	Class Available Tanker Fill Station	Tanker Fill Station Location
<b>Brendale</b>	Class B	Class B	3/26 Cribb Road
<b>Coolum</b>	Class B	Class B	Lot 2 Marsh Road
<b>Kawana</b>	Class B	Class B	Lot 101 Main Drive
<b>Landsborough</b>	Not supplied	Class B	Lot 10 Forestry Road
<b>Maleny</b>	Class B	Not supplied	Not supplied
<b>Maroochydore</b>	Class B / Class D	Class B	38 Commercial Road
<b>Murrumba Downs</b>	Class B	Class B	Lot 2 Bickle Road
<b>Nambour</b>	Class B / Class D	Class B	Lot 1 Bli Bli Road
<b>Noosa</b>	Class A	Class A	Lot 14 Wallum Lane
<b>Redcliffe</b>	Class C	Not supplied	Not Supplied
<b>South Caboolture</b>	Class A+	Class A+	<ul style="list-style-type: none"> <li>▪ 67 Weier Rd, Morayfield</li> <li>▪ Mewett St, Caboolture</li> <li>▪ Caboolture Regional Aquatic Centre Burpengary</li> </ul>
<b>Woodford</b>	Class A	Class A	Neurum Road, adjacent Woodford Showgrounds

# Definitions

Units/Parameter	Definition
<b>MPN/100mL</b>	Most Probable Number per 100 millilitre
<b>CFU/mL</b>	Colony Forming Units per millilitre
<b>mg/L</b>	milligrams per litre
<b>µS/cm</b>	Microsiemens per centimetre
<b>pH units</b>	pH units
<b>NTU</b>	Nephelometric Turbidity Units
<b>Nitrogen (Ammonia)</b>	Ammoniacal nitrogen (NH <sub>3</sub> -N) is a measure for the amount of ammonia found in effluent.
<b>Nitrogen (Oxidised)</b>	The sum of nitrate-nitrogen (NO <sub>3</sub> -N) and nitrite-nitrogen (NO <sub>2</sub> -N) only
<b>Nitrogen (total)</b>	The sum of nitrate-nitrogen (NO <sub>3</sub> -N), nitrite-nitrogen (NO <sub>2</sub> -N), ammonia-nitrogen (NH <sub>3</sub> -N) and organically bound nitrogen (N <sub>org</sub> -N).
<b>Phosphorous (total)</b>	The sum of three forms of phosphorous species: reactive, condensed and organic.
<b>Median</b>	The middle value of the dataset. <i>E. coli</i> results are reported as a median in this performance report.

# Brendale STP

## Irrigator & tanker customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	53 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	51	696
<b>Nitrogen (Ammonia)</b>	mg/L	51	0.9
<b>Nitrogen (Oxidised)</b>	mg/L	51	1.7
<b>Nitrogen (Total)</b>	mg/L	51	4
<b>pH</b>	pH Units	52	7.3
<b>Phosphorous (Total)</b>	mg/L	51	0.95
<b>Suspended Solids</b>	mg/L	52	5

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Coolum STP

Irrigator & tanker customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	42 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	42	804
<b>Nitrogen (Ammonia)</b>	mg/L	42	0.4
<b>Nitrogen (Oxidised)</b>	mg/L	42	3.2
<b>Nitrogen (Total)</b>	mg/L	42	4.3
<b>pH</b>	pH Units	42	7.5
<b>Phosphorous (Total)</b>	mg/L	41	1
<b>Suspended Solids</b>	mg/L	42	3

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value



# Kawana STP

Irrigator and industrial users  
- Class B

Tanker customers -  
Class B

Parameter	Units	Number of tests	Average	Number of tests	Average
<b>E. coli</b>	MPN/100mL	51 <sup>b</sup>	3*	51 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	52	1068	50	1066
<b>Nitrogen (Ammonia)</b>	mg/L	52	4.3	50	4
<b>Nitrogen (Oxidised)</b>	mg/L	52	2.3	50	3.9
<b>Nitrogen (Total)</b>	mg/L	52	8	50	9.4
<b>pH</b>	pH units	52	7.1	50	7.1
<b>Phosphorous (Total)</b>	pH units	52	4.1	52	4.1
<b>Suspended Solids</b>	mg/L	52	4	Not Tested	Not Tested

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

Not Tested = parameter is not tested at this sample site

# Landsborough STP

## Tanker customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	49 <sup>b</sup>	1*
<b>Conductivity</b>	µS/cm	50	573
<b>Nitrogen (Ammonia)</b>	mg/L	50	0.7
<b>Nitrogen (Oxidised)</b>	mg/L	50	1.4
<b>Nitrogen (Total)</b>	mg/L	50	3.2
<b>pH</b>	pH Units	50	7.5
<b>Phosphorous (Total)</b>	mg/L	50	1.6
<b>Suspended Solids</b>	mg/L	50	4

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Maleny STP

## Irrigator customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	52 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	53	497
<b>Nitrogen (Ammonia)</b>	mg/L	53	<0.05
<b>Nitrogen (Oxidised)</b>	mg/L	53	1.5
<b>Nitrogen (Total)</b>	mg/L	53	2
<b>pH</b>	pH Units	53	7.1
<b>Phosphorous (Total)</b>	mg/L	53	0.6
<b>Suspended Solids</b>	mg/L	53	3

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Maroochydore STP

Cane Irrigator - Class B

Irrigator & tanker customers - Class B

Parameter	Units	Number of tests	Average	Number of tests	Average
<b>E. coli</b>	MPN/100mL	54 <sup>b</sup>	305*	53 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	53	1948	53	1948
<b>Nitrogen (Ammonia)</b>	mg/L	53	0.5	53	0.5
<b>Nitrogen (Oxidised)</b>	mg/L	53	3	53	3
<b>Nitrogen (Total)</b>	mg/L	53	4.3	53	4.3
<b>pH</b>	pH units	53	7	53	7
<b>Phosphorous (Total)</b>	mg/L	52	0.15	52	0.15
<b>Suspended Solids</b>	mg/L	53	5	53	5

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Murrumba Downs STP

Irrigator & tanker customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	54 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	52	711
<b>Nitrogen (Ammonia)</b>	mg/L	52	0.1
<b>Nitrogen (Oxidised)</b>	mg/L	52	<0.5
<b>Nitrogen (Total)</b>	mg/L	52	1
<b>pH</b>	pH Units	52	7.8
<b>Phosphorous (Total)</b>	mg/L	52	1
<b>Suspended Solids</b>	mg/L	53	<2

<sup>b</sup> As per Public Health Regulation 2005, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Nambour STP

Irrigator & tanker customers  
- Class B

Turf irrigator  
customers - Class D

Parameter	Units	Number of tests	Average	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	51 <sup>b</sup>	<1*	53 <sup>b</sup>	50*
<b>Conductivity</b>	µS/cm	53	842	53	842
<b>Nitrogen (Ammonia)</b>	mg/L	53	0.5	53	0.5
<b>Nitrogen (Oxidised)</b>	mg/L	53	0.6	53	0.6
<b>Nitrogen (Total)</b>	mg/L	53	2.2	53	2.2
<b>pH</b>	pH units	53	7.5	53	7.5
<b>Phosphorous (Total)</b>	mg/L	52	7.5	52	7.5
<b>Suspended Solids</b>	mg/L	53	3	53	3

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Noosa STP

## Irrigator & tanker customers - Class A

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	49 <sup>b</sup>	1*
<b>Conductivity</b>	µS/cm	42	1434
<b>Nitrogen (Ammonia)</b>	mg/L	50	0.1
<b>Nitrogen (Oxidised)</b>	mg/L	50	2.7
<b>Nitrogen (Total)</b>	mg/L	42	3.6
<b>pH</b>	pH Units	42	7.6
<b>Phosphorous (Total)</b>	mg/L	42	0.3
<b>Suspended Solids</b>	mg/L	42	3

<sup>b</sup> As per Public Health Regulation 2005, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# Redcliffe STP

## Irrigator customers - Class C

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	49 <sup>b</sup>	1*
<b>Conductivity</b>	µS/cm	51	1544
<b>Nitrogen (Ammonia)</b>	mg/L	49	0.6
<b>Nitrogen (Oxidised)</b>	mg/L	49	1.3
<b>Nitrogen (Total)</b>	mg/L	49	3
<b>pH</b>	pH Units	51	7.1
<b>Phosphorous (Total)</b>	mg/L	49	0.2
<b>Suspended Solids</b>	mg/L	49	3

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value



# Woodford STP

## Irrigator & tanker customers - Class A

Parameter	Units	Number of tests	Average
<b>E. coli</b>	MPN/100mL	48 <sup>b</sup>	<1*
<b>Conductivity</b>	µS/cm	52	689
<b>Nitrogen (Ammonia)</b>	mg/L	49	0.1
<b>Nitrogen (Oxidised)</b>	mg/L	49	2.9
<b>Nitrogen (Total)</b>	mg/L	49	3.7
<b>pH</b>	pH Units	52	7.4
<b>Phosphorous (Total)</b>	mg/L	49	0.2
<b>Suspended Solids</b>	mg/L	50	<2

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value

# South Caboolture recycled water network

Commercial, industrial, municipal & residential customers - Class A+

Parameter	Units	Number of tests	Average
<b><i>E. coli</i></b>	MPN/100mL	49 <sup>b</sup>	<1*
<b>Free chlorine</b>	mg/L	241	0.27
<b>Total Chlorine</b>	mg/L	241	1.33
<b>Conductivity</b>	µS/cm	240	202
<b>Turbidity</b>	NTU	246	0.2

<sup>b</sup> As per *Public Health Regulation 2005*, *E. coli* is sampled weekly, unless the recycled water scheme is isolated (e.g. due to planned maintenance)

\*Median Value



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Unitywater has certification to  
OH&S ISO 4801  
Environmental ISO 14001  
Quality Systems ISO 9001  
Food Safety Management ISO 22000



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