

ANNUAL

# Recycled Water

PERFORMANCE REPORT

JULY 2017 - JUNE 2018



**Unity**water

Serving you today,  
investing in tomorrow.

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**Unitywater**

Serving you today,  
investing in tomorrow.

Dear Customers

I am pleased to share with you our Recycled Water Performance Report for 2017-18 which provides information about the provision of recycled water in our region.

At Unitywater, we take our compliance responsibilities very seriously and this report demonstrates our ongoing commitment to customers that this water meets the requirements of the Water Supply (Safety and Reliability) Act 2008.

We also continue to focus on the sustainability and the security of water resources for our communities. In a country so susceptible to drought, recycled water is an increasingly valuable supply source for a range of residential, commercial and industrial purposes.

Thank you for your interest in this report. I hope the information is useful in confirming our commitment to quality standards and in raising awareness about the range of benefits of recycled water reuse.

If you have any questions or feedback on the content of this report, please do not hesitate to call our Customer Contact Centre on 1300 086 489.



George Theo  
Chief Executive Officer

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 [unitywater.com/business/Recycled-Water](http://unitywater.com/business/Recycled-Water)

## Key facts

12   
Schemes Supplying Recycled Water

A+   
A+, A, B, C, D Classes Supplied

35   
Fixed Site Commercial, Industrial and Municipal Customers

134   
Tanker Carrier Customers

1203   
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 [unitywater.com/business/Recycled-Water](http://unitywater.com/business/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 - NOT PERMITTED	—	—	—	—	—
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 NOT PERMITTED	—	—	—	—	—
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 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+	67 Weier Rd, Morayfield Mewett St, Caboolture Caboolture Regional Aquatic Centre Burpengary
<b>Woodford</b>	Class A	Class A	Neurum Road, adjacent Woodford Showgrounds

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.

## Irrigator and 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	52	723
<b>Nitrogen (Ammonia)</b>	mg/L	52	1.3
<b>Nitrogen (Oxidised)</b>	mg/L	53	2.2
<b>Nitrogen (Total)</b>	mg/L	53	5
<b>pH</b>	pH Units	106	7.3
<b>Phosphorous (Total)</b>	mg/L	53	0.4
<b>Suspended Solids</b>	mg/L	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



## Irrigator and tanker customers - Class B

Parameter	Units	Number of tests	Average
<b><i>E.coli</i></b>	MPN/100mL	50 <sup>[b]</sup>	4*
<b>Conductivity</b>	µS/cm	49	908
<b>Nitrogen (Ammonia)</b>	mg/L	49	0.4
<b>Nitrogen (Oxidised)</b>	mg/L	49	1.1
<b>Nitrogen (Total)</b>	mg/L	49	2.2
<b>pH</b>	pH Units	49	7.6
<b>Phosphorous (Total)</b>	mg/L	49	0.7
<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

Parameter	Units	Irrigator and concrete factory - Class B		Tanker customers - Class B	
		Number of tests	Average	Number of tests	Average
<b><i>E.coli</i></b>	MPN/100mL	51 <sup>[b]</sup>	10*	52 <sup>[b]</sup>	1*
<b>Conductivity</b>	µS/cm	50	1192	50	1174
<b>Nitrogen (Ammonia)</b>	mg/L	50	6.5	50	4.8
<b>Nitrogen (Oxidised)</b>	mg/L	50	2.1	50	4.2
<b>Nitrogen (Total)</b>	mg/L	50	10	50	10.2
<b>pH</b>	pH units	50	7.1	50	7.1
<b>Phosphorous (Total)</b>	pH units	50	3.2	50	2.7
<b>Suspended Solids</b>	mg/L	50	5	28	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

## Tanker 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	51	534
<b>Nitrogen (Ammonia)</b>	mg/L	51	0.8
<b>Nitrogen (Oxidised)</b>	mg/L	51	1.4
<b>Nitrogen (Total)</b>	mg/L	51	3.2
<b>pH</b>	pH Units	51	7.5
<b>Phosphorous (Total)</b>	mg/L	51	1.3
<b>Suspended Solids</b>	mg/L	51	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

## Irrigator customers - Class B

Parameter	Units	Number of tests	Average
<i>E.coli</i>	MPN/100mL	54 <sup>[b]</sup>	<1*
<b>Conductivity</b>	µS/cm	53	463
<b>Nitrogen (Ammonia)</b>	mg/L	53	<0.05
<b>Nitrogen (Oxidised)</b>	mg/L	53	2.2
<b>Nitrogen (Total)</b>	mg/L	53	2.6
<b>pH</b>	pH Units	53	7.1
<b>Phosphorous (Total)</b>	mg/L	53	0.1
<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

Parameter	Units	Cane Irrigator - Class D		Irrigator and tanker customers - Class B	
		Number of tests	Average	Number of tests	Average
<b><i>E.coli</i></b>	MP-N/100mL	42 <sup>[b]</sup>	300*	42 <sup>[b]</sup>	6*
<b>Conductivity</b>	µS/cm	43	2535	43	2535
<b>Nitrogen (Ammonia)</b>	mg/L	43	0.1	43	0.1
<b>Nitrogen (Oxidised)</b>	mg/L	43	2.6	43	2.6
<b>Nitrogen (Total)</b>	mg/L	43	3.5	43	3.5
<b>pH</b>	pH units	43	7.1	43	7.1
<b>Phosphorous (Total)</b>	mg/L	43	0.3	43	0.3
<b>Suspended Solids</b>	mg/L	43	7	43	7

<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

## Irrigator and tanker customers - Class B

Parameter	Units	Number of tests	Average
<i>E.coli</i>	MPN/100mL	54 <sup>(b)</sup>	<1*
<b>Conductivity</b>	µS/cm	54	728
<b>Nitrogen (Ammonia)</b>	mg/L	54	0.2
<b>Nitrogen (Oxidised)</b>	mg/L	54	<0.5
<b>Nitrogen (Total)</b>	mg/L	54	1.4
<b>pH</b>	pH Units	54	7.8
<b>Phosphorous (Total)</b>	mg/L	54	0.5
<b>Suspended Solids</b>	mg/L	54	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

Parameter	Units	Irrigator and tanker customers - Class B		Turf irrigator customer - Class D	
		Number of tests	Average	Number of tests	Average
<b><i>E.coli</i></b>	MP-N/100mL	51 <sup>[b]</sup>	<1*	51 <sup>[b]</sup>	480*
<b>Conductivity</b>	µS/cm	50	799	50	799
<b>Nitrogen (Ammonia)</b>	mg/L	50	0.1	50	0.1
<b>Nitrogen (Oxidised)</b>	mg/L	50	0.6	50	0.6
<b>Nitrogen (Total)</b>	mg/L	50	1.6	50	1.6
<b>pH</b>	pH units	50	7.6	50	7.6
<b>Phosphorous (Total)</b>	pH units	50	0.4	50	0.4
<b>Suspended Solids</b>	mg/L	50	3	50	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

## Irrigator and tanker customers - Class A

Parameter	Units	Number of tests	Average
<b><i>E.coli</i></b>	MPN/100mL	53 <sup>[b]</sup>	<1*
<b>Conductivity</b>	µS/cm	53	1638
<b>Nitrogen (Ammonia)</b>	mg/L	51	0.3
<b>Nitrogen (Oxidised)</b>	mg/L	51	3.3
<b>Nitrogen (Total)</b>	mg/L	53	4.5
<b>pH</b>	pH Units	53	7.6
<b>Phosphorous (Total)</b>	mg/L	53	0.2
<b>Suspended Solids</b>	mg/L	53	1.8

<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



## Irrigator customers - Class C

Parameter	Units	Number of tests	Average
<b><i>E.coli</i></b>	MPN/100mL	47 <sup>(b)</sup>	1*
<b>Conductivity</b>	µS/cm	46	1627
<b>Nitrogen (Ammonia)</b>	mg/L	46	0.7
<b>Nitrogen (Oxidised)</b>	mg/L	46	1.6
<b>Nitrogen (Total)</b>	mg/L	46	3.4
<b>pH</b>	pH Units	46	7.2
<b>Phosphorous (Total)</b>	mg/L	46	0.2
<b>Suspended Solids</b>	mg/L	46	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

## Irrigator and tanker customers - Class A

Parameter	Units	Number of tests	Average
<b><i>E.coli</i></b>	MPN/100mL	41 <sup>(b)</sup>	<1*
<b>Conductivity</b>	µS/cm	49	675
<b>Nitrogen (Ammonia)</b>	mg/L	49	<0.05
<b>Nitrogen (Oxidised)</b>	mg/L	49	4.1
<b>Nitrogen (Total)</b>	mg/L	49	4.8
<b>pH</b>	pH Units	49	7.4
<b>Phosphorous (Total)</b>	mg/L	49	0.7
<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

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

Parameter	Units	Number of tests	Average
<i>E.coli</i>	MPN/100mL	52 <sup>(b)</sup>	<1 *
Free Chlorine	mg/L	257	0.4
Total Chlorine	mg/L	257	0.6
Conductivity	µS/cm	256	227
Turbidity	NTU	252	0.1

<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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