

ANNUAL

Recycled Water

PERFORMANCE REPORT

JULY 2017 - JUNE 2018



Unitywater

Serving you today,
investing in tomorrow.

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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

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

| 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 | ✓ | ✓ | ✓ ^a | — | — |
| Watering parks, playing fields, footpaths and roadside plants | ✓ | ✓ | ✓ ^a | ✓ ^a | — |
| 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 | ✓ | ✓ | ✓ ^a | — | — |
| Washing cars | ✓ | — | — | — | — |
| Washing animals (except pigs) | ✓ | — | — | — | — |
| Hydraulic testing of sewer infrastructure | ✓ | ✓ | ✓ | ✓ | — |
| Irrigation of landscaping on construction sites | ✓ | ✓ | ✓ ^a | — | — |
| Filling or topping up of swimming pools or spas NOT PERMITTED | — | — | — | — | — |
| Irrigating sugar cane destined for non-edible purposes (fixed site users only) | ✓ | ✓ | ✓ | ✓ ^a | ✓ ^a |
| Irrigating turf (fixed site users only) | ✓ | ✓ | ✓ | ✓ ^a | ✓ ^a |

✓ listed use is approved for this class of recycled water

— listed use not approved for this class of recycled water

^a 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 |
|-------------------------|--------------------------------------|-------------------------------------|--|
| Brendale | Class B | Class B | 3/26 Cribb Road |
| Coolum | Class B | Class B | Lot 2 Marsh Road |
| Kawana | Class B | Class B | Lot 101 Main Drive |
| Landsborough | Not supplied | Class B | Lot 10 Forestry Road |
| Maleny | Class B | Not supplied | Not supplied |
| Maroochydore | Class B / Class D | Class B | 38 Commercial Road |
| Murrumba Downs | Class B | Class B | Lot 2 Bickle Road |
| Nambour | Class B / Class D | Class B | Lot 1 Bli Bli Road |
| Noosa | Class A | Class A | Lot 14 Wallum Lane |
| Redcliffe | Class C | Not supplied | Not Supplied |
| South Caboolture | Class A+ | Class A+ | 67 Weier Rd, Morayfield Mewett St, Caboolture Caboolture Regional Aquatic Centre Burpengary |
| Woodford | Class A | Class A | Neurum Road, adjacent Woodford Showgrounds |

| Units/Parameter | Definition |
|----------------------------|--|
| MPN/100mL | Most Probable Number per 100 millilitre |
| CFU/mL | Colony Forming Units per millilitre |
| mg/L | milligrams per litre |
| µS/cm | Microsiemens per centimetre |
| pH units | pH units |
| NTU | Nephelometric Turbidity Units |
| Nitrogen (Ammonia) | Ammoniacal nitrogen (NH ₃ -N) is a measure for the amount of ammonia found in effluent. |
| Nitrogen (Oxidised) | The sum of nitrate-nitrogen (NO ₃ -N) and nitrite-nitrogen (NO ₂ -N) only |
| Nitrogen (total) | The sum of nitrate-nitrogen (NO ₃ -N), nitrite-nitrogen (NO ₂ -N), ammonia-nitrogen (NH ₃ -N) and organically bound nitrogen (N _{org} -N). |
| Phosphorous (total) | The sum of three forms of phosphorous species: reactive, condensed and organic. |
| Median | 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 |
|----------------------------|-----------|-------------------|---------|
| <i>E.coli</i> | MPN/100mL | 53 ^[b] | <1* |
| Conductivity | µS/cm | 52 | 723 |
| Nitrogen (Ammonia) | mg/L | 52 | 1.3 |
| Nitrogen (Oxidised) | mg/L | 53 | 2.2 |
| Nitrogen (Total) | mg/L | 53 | 5 |
| pH | pH Units | 106 | 7.3 |
| Phosphorous (Total) | mg/L | 53 | 0.4 |
| Suspended Solids | mg/L | 53 | 5 |

^[b] 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 | 50 ^[b] | 4* |
| Conductivity | µS/cm | 49 | 908 |
| Nitrogen (Ammonia) | mg/L | 49 | 0.4 |
| Nitrogen (Oxidised) | mg/L | 49 | 1.1 |
| Nitrogen (Total) | mg/L | 49 | 2.2 |
| pH | pH Units | 49 | 7.6 |
| Phosphorous (Total) | mg/L | 49 | 0.7 |
| Suspended Solids | mg/L | 49 | 3 |

^[b] 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 |
| <i>E.coli</i> | MPN/100mL | 51 ^[b] | 10* | 52 ^[b] | 1* |
| Conductivity | µS/cm | 50 | 1192 | 50 | 1174 |
| Nitrogen (Ammonia) | mg/L | 50 | 6.5 | 50 | 4.8 |
| Nitrogen (Oxidised) | mg/L | 50 | 2.1 | 50 | 4.2 |
| Nitrogen (Total) | mg/L | 50 | 10 | 50 | 10.2 |
| pH | pH units | 50 | 7.1 | 50 | 7.1 |
| Phosphorous (Total) | pH units | 50 | 3.2 | 50 | 2.7 |
| Suspended Solids | mg/L | 50 | 5 | 28 | 4 |

^[b] 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 |
|----------------------------|-----------|-------------------|---------|
| <i>E.coli</i> | MPN/100mL | 52 ^(b) | <1* |
| Conductivity | µS/cm | 51 | 534 |
| Nitrogen (Ammonia) | mg/L | 51 | 0.8 |
| Nitrogen (Oxidised) | mg/L | 51 | 1.4 |
| Nitrogen (Total) | mg/L | 51 | 3.2 |
| pH | pH Units | 51 | 7.5 |
| Phosphorous (Total) | mg/L | 51 | 1.3 |
| Suspended Solids | mg/L | 51 | 5 |

^(b) 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 ^[b] | <1* |
| Conductivity | µS/cm | 53 | 463 |
| Nitrogen (Ammonia) | mg/L | 53 | <0.05 |
| Nitrogen (Oxidised) | mg/L | 53 | 2.2 |
| Nitrogen (Total) | mg/L | 53 | 2.6 |
| pH | pH Units | 53 | 7.1 |
| Phosphorous (Total) | mg/L | 53 | 0.1 |
| Suspended Solids | mg/L | 53 | <2 |

^[b] 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 |
| <i>E.coli</i> | MP-N/100mL | 42 ^[b] | 300* | 42 ^[b] | 6* |
| Conductivity | µS/cm | 43 | 2535 | 43 | 2535 |
| Nitrogen (Ammonia) | mg/L | 43 | 0.1 | 43 | 0.1 |
| Nitrogen (Oxidised) | mg/L | 43 | 2.6 | 4. | 2.6 |
| Nitrogen (Total) | mg/L | 43 | 3.5 | 43 | 3.5 |
| pH | pH units | 43 | 7.1 | 43 | 7.1 |
| Phosphorous (Total) | pH units | 43 | 0.3 | 43 | 0.3 |
| Suspended Solids | mg/L | 43 | 7 | 43 | 7 |

^[b] 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 ^(b) | <1* |
| Conductivity | µS/cm | 54 | 728 |
| Nitrogen (Ammonia) | mg/L | 54 | 0.2 |
| Nitrogen (Oxidised) | mg/L | 54 | <0.5 |
| Nitrogen (Total) | mg/L | 54 | 1.4 |
| pH | pH Units | 54 | 7.8 |
| Phosphorous (Total) | mg/L | 54 | 0.5 |
| Suspended Solids | mg/L | 54 | 2 |

^(b) 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 |
| <i>E.coli</i> | MP-N/100mL | 51 ^[b] | <1* | 51 ^[b] | 480* |
| Conductivity | µS/cm | 50 | 799 | 50 | 799 |
| Nitrogen (Ammonia) | mg/L | 50 | 0.1 | 50 | 0.1 |
| Nitrogen (Oxidised) | mg/L | 50 | 0.6 | 50 | 0.6 |
| Nitrogen (Total) | mg/L | 50 | 1.6 | 50 | 1.6 |
| pH | pH units | 50 | 7.6 | 50 | 7.6 |
| Phosphorous (Total) | pH units | 50 | 0.4 | 50 | 0.4 |
| Suspended Solids | mg/L | 50 | 3 | 50 | 3 |

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

^[b] 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 |
|----------------------------|-----------|-------------------|---------|
| <i>E.coli</i> | MPN/100mL | 47 ^(b) | 1* |
| Conductivity | µS/cm | 46 | 1627 |
| Nitrogen (Ammonia) | mg/L | 46 | 0.7 |
| Nitrogen (Oxidised) | mg/L | 46 | 1.6 |
| Nitrogen (Total) | mg/L | 46 | 3.4 |
| pH | pH Units | 46 | 7.2 |
| Phosphorous (Total) | mg/L | 46 | 0.2 |
| Suspended Solids | mg/L | 46 | 3 |

^(b) 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 |
|----------------------------|-----------|-------------------|---------|
| <i>E.coli</i> | MPN/100mL | 41 ^(b) | <1* |
| Conductivity | µS/cm | 49 | 675 |
| Nitrogen (Ammonia) | mg/L | 49 | <0.05 |
| Nitrogen (Oxidised) | mg/L | 49 | 4.1 |
| Nitrogen (Total) | mg/L | 49 | 4.8 |
| pH | pH Units | 49 | 7.4 |
| Phosphorous (Total) | mg/L | 49 | 0.7 |
| Suspended Solids | mg/L | 49 | 3 |

^(b) 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 ^(b) | <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 |

^(b) 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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investing in tomorrow.

-
-  unitywater.com
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Emergencies and Faults 24 hours
Customer Service: 7am - 6pm,
Mon - Fri (except public holidays)
 -  Unitywater, PO Box 953, Caboolture QLD 4510
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Unitywater has certification to
OH&S ISO 4801
Environmental ISO 14001
Quality Systems ISO 9001
Food Safety Management ISO 22000



HEALTH
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ENVIRONMENTAL



QUALITY
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