

Water Quality Summary - June 2025

Hunter Water provides safe and reliable drinking water to over half a million customers in the Lower Hunter. The drinking water we supply is routinely tested throughout our water supply systems.

Whole of Hunter Water Distribution System

Drinking water results for the distribution system are based on samples representative of water supplied to customer's taps. Distribution system results for microbiological and key physical/chemical parameters are summarised below.

Whole of Hunter Water Distribution System - key health analytes

Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard
MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		100.00%	Yes
Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	95th Percentile over the last 12 months	Met performance standard
mg/L	1.5		0.57	1.00	Yes
mg/L	5.0		1.07	1.61	Yes
mg/L	2.0	95th percentile of test results less than	0.006	0.012	Yes
mg/L	0.01	respective ADWG health guideline value	0.000	0.001	Yes
mg/L	0.5		0.003	0.010	Yes
mg/L	0.25		0.086	0.167	Yes
	MPN/100mL Units of measure mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Units of measure guideline value MPN/100mL Should not be detected in 100mL Units of measure ADWG health guideline value** mg/L 1.5 mg/L 5.0 mg/L 2.0 mg/L 0.01 mg/L 0.5	Units of measure guideline value over previous 12 months) MPN/100mL Should not be detected in 100mL At least 98% of test results <1	Units of measure guideline value over previous 12 months) MPN/100mL Should not be detected in 100mL At least 98% of test results <1	Units of measure ADWG health guideline value Performance standard (assessment over previous 12 months) results < 1 over the last 12 months MPN/100mL Should not be detected in 100mL At least 98% of test results <1

Whole of Hunter Water Distribution System - PFOS, PFHxS & PFOA

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective ADWG health guideline value	< 0.004	<0.004	Yes
PFOA	ug/L	0.56		<0.002	<0.002	Yes

Whole of Hunter Water Distribution System - key aesthetic analytes

Analyte	Units of measure	ADWG aesthetic guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard
Iron	mg/L	0.3		0.026	0.022	Yes
Aluminium	mg/L	0.2		0.033	0.039	Yes
Copper	mg/L	1.0	Average of test results less than	0.006	0.006	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.004	0.003	Yes
Manganese	mg/L	0.1	value	0.003	0.004	Yes
Turbidity	NTU	5.0		0.2	0.2	Yes
Colour-True	HU	15.0		5	5	Yes
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	7.52	7.56	Yes

 Brief explanation of key parameters:
 Key Physical, Chemical and Microbiological Parameters

 A 95th percentile is a statistical method to evaluate the long-term performance standard for Health-related analytes. Additional information is available in Section 10.3.2 and Information Sheet 3.3 of the Australian Drinking Water Guidelines 2011 (ADWG).

 For more detail please refer:
 Australian Drinking Water Guidelines 2011

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Map showing water quality zones:	Water Quality Zones at Hunter Water

Water Quality Zones

Anna Bay and Nelson Bay Zone - key health analytes

Anna Bay and Nelson Bay Zone - key heal	th analytes					
Analyte	Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard
E. coli	MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		100.00%	Yes
Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	95th Percentile over the last 12 months	Met performance standard
Fluoride	mg/L	1.5		0.75	1.00	Yes
Chlorine	mg/L	5.0		1.22	1.71	Yes
Copper	mg/L	2.0	95th percentile of test results less than	0.007	0.014	Yes
Lead	mg/L	0.01	respective ADWG health guideline value	0.000	0.000	Yes
Manganese	mg/L	0.5	1	0.003	0.010	Yes
Trihalomethanes	mg/L	0.25		0.052	0.111	Yes
Anna Bay and Nelson Bay Zone - PFOS, P	FHxS & PFOA	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective ADWG health guideline value	<0.004	<0.004	Yes
PFOA	ug/L	0.56		<0.002	<0.002	Yes

Anna Bay and Nelson Bay Zone - key aesthetic analytes

Analyte	Units of measure	ADWG aesthetic guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard
Iron	mg/L	0.3		0.033	0.041	Yes
Aluminium	mg/L	0.2		0.038	0.045	Yes
Copper	mg/L	1.0	Average of test results less than	0.007	0.007	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.007	0.003	Yes
Manganese	mg/L	0.1	value	0.003	0.004	Yes
Turbidity	NTU	5.0		0.2	0.2	Yes
Colour-True	HU	15.0		5	5	Yes
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	7.46	7.53	Yes

Chichester Zone - key health analytes

Analyte	Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard
E. coli	MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		100.00%	Yes
Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	95th Percentile over the last 12 months	Met performance standard
Fluoride	mg/L	1.5		0.21	0.90	Yes
Chlorine	mg/L	5.0		1.06	1.48	Yes
Copper	mg/L	2.0	95th percentile of test results less than	0.007	0.014	Yes
Lead	mg/L	0.01	respective ADWG health guideline value	0.000	0.000	Yes
Manganese	mg/L	0.5		0.003	0.006	Yes
Trihalomethanes	mg/L	0.25		0.090	0.113	Yes
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Chichester Zone - PFOS, PFHxS & PFOA

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective ADWG health guideline value	<0.004	<0.004	Yes
PFOA	ug/L	0.56		<0.002	<0.002	Yes

Chichester Zone - key aesthetic analytes

Analyte	Units of measure	ADWG aesthetic guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard
Iron	mg/L	0.3		0.025	0.019	Yes
Aluminium	mg/L	0.2		0.028	0.034	Yes
Copper	mg/L	1.0	Average of test results less than	0.007	0.008	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.002	0.002	Yes
Manganese	mg/L	0.1	value	0.003	0.003	Yes
Turbidity	NTU	5.0		0.2	0.2	Yes
Colour-True	HU	15.0		5	5	Yes
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	7.63	7.65	Yes

Grahamstown Zone - key health analytes							
Analyte	Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard	
E. coli	MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		100.00%	Yes	
Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	95th Percentile over the last 12 months	Met performance standard	
Fluoride	mg/L	1.5		0.10	1.00	Yes	
Chlorine	mg/L	5.0		1.03	1.58	Yes	
Copper	mg/L	2.0	95th percentile of test results less than	0.005	0.012	Yes	
Lead	mg/L	0.01	respective ADWG health guideline value	0.000	0.001	Yes	
Manganese	mg/L	0.5		0.003	0.010	Yes	
Trihalomethanes	mg/L	0.25		0.103	0.141	Yes	

Grahamstown Zone - PFOS, PFHxS & PFOA

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective	<0.004	<0.004	Yes
PFOA	ug/L	0.56	ADWG health guideline value	<0.002	<0.002	Yes
Grahamstown Zone - key aesthetic analytes						

Analyte	Units of measure	ADWG aesthetic guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard
Iron	mg/L	0.3		0.025	0.020	Yes
Aluminium	mg/L	0.2	Average of test results less than	0.033	0.042	Yes
Copper	mg/L	1.0		0.005	0.006	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.003	0.003	Yes
Manganese	mg/L	0.1	value	0.003	0.004	Yes
Turbidity	NTU	5.0		0.2	0.2	Yes
Colour-True	HU	15.0		5	5	Yes
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	7.42	7.48	Yes

Analyte	Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard	
E. coli	MPN/100mL	Should not be detected in 100mL At least 98% of test results <1			100.00%	Yes	
Analyte	Units of measure	ADWG health guideline value			95th Percentile over the last 12 months	Met performance standard	
Chlorine	mg/L	5.0	95th percentile of test results less than respective ADWG health guideline value	2.09	1.93	Yes	

Gresford Zone - PFOS, PFHxS & PFOA

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month #	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective	<0.004	<0.004	Yes
PFOA	ug/L	0.56	ADWG health guideline value	<0.002	<0.002	Yes

Gresford Zone - key aesthetic analytes

Analyte	Units of measure	ADWG aesthetic guideline value	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard		
Turbidity	NTU	5.0	Average of test results less than respective ADWG aesthetic guideline value	0.4	0.1	Yes		
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	8.12	8.39	Yes		

Lemon Tree Passage Zone - key health analytes								
Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)		% of E. coli results < 1 over the last 12 months	Met performance standard			
MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		100.00%	Yes			
Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	95th Percentile over the last 12 months	Met performance standard			
mg/L	1.5		0.93	1.00	Yes			
mg/L	5.0	-	0.93	1.74	Yes			
mg/L	2.0	95th percentile of test results less than respective ADWG health guideline value	0.003	0.006	Yes			
mg/L	0.01		0.000	0.000	Yes			
mg/L	0.5		0.005	0.016	Yes			
mg/L	0.25		0.064	0.167	Yes			
	MPN/100mL Units of measure mg/L mg/L mg/L mg/L mg/L	Units of measure guideline value MPN/100mL Should not be detected in 100mL Units of measure ADWG health guideline value** mg/L 1.5 mg/L 5.0 mg/L 2.0 mg/L 0.01 mg/L 0.5	Units of measure guideline value over previous 12 months) MPN/100mL Should not be detected in 100mL At least 98% of test results <1	Units of measure guideline value over previous 12 months) MPN/100mL Should not be detected in 100mL At least 98% of test results <1	Units of measure ADWG healting guideline value Performance standard (assessment over previous 12 months) results < 1 over the last 12 months MPN/100mL Should not be detected in 100mL At least 98% of test results <1			

Lemon Tree Passage Zone - PFOS, PFHxS & PFOA

Analyte	Units of measure	ADWG health guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	Maximum detection over the last 12 months	Met performance standard
PFOS + PFHxS	ug/L	0.07	100% of test reults less than respective	<0.004	<0.004	Yes
PFOA	ug/L	0.56	ADWG health guideline value	<0.002	<0.002	Yes

Lemon Tree Passage Zone - key aesthetic analytes

Analyte	Units of measure	ADWG aesthetic guideline value**	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performance standard
Iron	mg/L	0.3		0.031	0.028	Yes
Aluminium	mg/L	0.2		0.028	0.032	Yes
Copper	mg/L	1.0	Average of test results less than respective ADWG aesthetic guideline	0.003	0.004	Yes
Zinc	mg/L	3.0		0.003	0.003	Yes
Manganese	mg/L	0.1	value	0.005	0.005	Yes
Turbidity	NTU	5.0		0.2	0.3	Yes
Colour-True	HU	15.0		5	5	Yes
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	7.63	7.57	Yes

PFOS, PFHxS and PFOA Results for Clear Water Tanks - June 2025

Clear water tanks (CWTs) are the final point at each water treatment plant before water enters the distribution system for delivery to customers. Maximum drinking water results in the CWTs of the water treatment plants monitored during the month are summarised below.

Analyte	Units of measure	ADWG health guideline value**	Grahamstown CWT
PFOS + PFHxS	ug/L	0.07	<0.004
PFOA	ug/L	0.56	<0.002

PFOS, PFHxS and PFOA Results for Raw Waters - June 2025

Raw water monitoring points are representative of water received at the water treatment plants, prior to any treatment occurring. Maximum raw water results of the water treatment plants monitored during the month are summarised below.

Analyte	Units of measure	ADWG health guideline value**	Grahamstown Raw - East Main ^	Grahamstown Raw - West Main ^	Lemon Tree Passage WTP - Raw Water
PFOS + PFHxS	ug/L	0.07	<0.004	<0.004	<0.004
PFOA	ug/L	0.56	<0.002	<0.002	<0.002

Notes

** The ADWG values for Manganese, PFOS, PFHxS and PFOA were updated on 25th June 2025. Guideline values prior to this change are displayed in this report to represent the majority of June. Changes effective from 25 June 2025 are: Manganese health guideline limit = 0.1 mg/L Manganese aesthetic guideline limit = 0.05 mg/L PFOA health guideline limit = 0.2 ug/L PFOS health guideline limit = 0.02 ug/L PFMxS health guideline limit = 0.03 ug/L

^ Water sourced from the Tomago Borefield - when operational - is delivered to Grahamstown WTP via the 'East' Main. When the Tomago Borefield is not being used as part of the drinking water supply mix for the Lower Hunter, the 'East' and 'West' monitoring points are both representative of water sourced from Grahamstown Dam.

* Gresford WTP can be supplied from either the Allyn or Paterson Rivers. The plant was supplied from the Paterson River for the month.

One sample is collected per month in the Gresford Zone