

Water Quality Summary - May 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

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		0.52	1.00	Yes		
Chlorine	mg/L	5.0	-	1.08	1.59	Yes		
Copper	mg/L	2.0	95th percentile of test results less than	0.006	0.012	Yes		
Lead	mg/L	0.01	respective ADWG health guideline value	0.000	0.001	Yes		
Manganese	mg/L	0.5		0.004	0.009	Yes		
Trihalomethanes	mg/L	0.25		0.096	0.167	Yes		

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
Whole of Hunter Water Distribution System - key a	esthetic 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		0.023	0.022	Yes
Aluminium	mg/L	0.2		0.043	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	0.003	0.003	Yes
Manganese	mg/L	0.1	value	0.004	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	7.58	7.55	Yes
Brief explanation of key parameters:	:		· · · · · · · · · · · · · · · · · · ·		•	

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-relat Drinking Water Guidelines 2011 (ADWG).	ted analytes. Additional information is available in Section 10.3.2 and Information Sheet 3.3 of the Australian				
For more detail please refer:	Australian Drinking Water Guidelines 2011				
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 health an	nalytes					
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		0.70	1.00	Yes
Chlorine	mg/L	5.0		1.23	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		0.004	0.010	Yes
Trihalomethanes	mg/L	0.25		0.025	0.111	Yes
Anna Bay and Nelson Bay Zone - PFOS, PFHx	S & 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			
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		0.049	0.041	Yes			
Aluminium	mg/L	0.2		0.059	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	0.003	0.002	Yes			
Manganese	mg/L	0.1	value	0.004	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	7.55	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		0.20	0.90	Yes	
Chlorine	mg/L	5.0		1.20	1.46	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		0.002	0.006	Yes	
Trihalomethanes	mg/L	0.25		0.072	0.113	Yes	

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
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		0.016	0.018	Yes
Aluminium	mg/L	0.2		0.029	0.034	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	0.002	0.002	Yes
Manganese	mg/L	0.1	value	0.002	0.003	Yes
Turbidity	NTU	5.0		0.1	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	7.65	7.63	Yes

Grahamstown Zone - key health analytes	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		1.02	1.57	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		0.004	0.010	Yes			
Trihalomethanes	mg/L	0.25		0.098	0.130	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		
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		0.020	0.020	Yes		
Aluminium	mg/L	0.2		0.036	0.041	Yes		
Copper	mg/L	1.0	Average of test results less than	0.005	0.006	Yes		
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.004	0.004	Yes		
Manganese	mg/L	0.1	value	0.004	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	7.50	7.48	Yes		

Gresford 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		
Chlorine	mg/L	5.0	95th percentile of test results less than respective ADWG health guideline value	0.88	1.38	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		
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	0.1	0.1	Yes		
рН	pH units	6.5-9.2	Average of test results between 6.5-9.2 pH units	8.36	8.40	Yes		

Lemon Tree Passage Zone - key health analytes	Lemon Tree Passage 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		0.90	1.00	Yes			
Chlorine	mg/L	5.0		1.00	1.74	Yes			
Copper	mg/L	2.0	95th percentile of test results less than	0.004	0.007	Yes			
Lead	mg/L	0.01	respective ADWG health guideline value	0.000	0.000	Yes			
Manganese	mg/L	0.5		0.011	0.014	Yes			
Trihalomethanes	mg/L	0.25		0.115	0.167	Yes			
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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	
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		0.035	0.028	Yes
Aluminium	mg/L	0.2		0.034	0.032	Yes
Copper	mg/L	1.0	Average of test results less than	0.004	0.004	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.004	0.003	Yes
Manganese	mg/L	0.1	value	0.011	0.005	Yes
Turbidity	NTU	5.0		0.4	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	7.66	7.54	Yes

PFOS, PFHxS and PFOA Results for Clear Water Tanks - May 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	Anna Bay CWT	Dungog CWT 2	Grahamstown CWT	Gresford CWT	Lemon Tree Passage CWT	Nelson Bay CWT
PFOS + PFHxS	ug/L	0.07	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
PFOA	ug/L	0.56	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

PFOS, PFHxS and PFOA Results for Raw Waters - May 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	Anna Bay WTP - Raw Water	Dungog TW Raw	Grahamstown Raw - East Main ^	Grahamstown Raw - West Main ^		Gresford (Paterson River) WTP *	Lemon Tree Passage WTP - Raw Water	Nelson Bay WTP - Raw Water
PFOS + PFHxS	ug/L	0.07	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
PFOA	ug/L	0.56	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes

A 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