

## Water Quality Summary - August 2023

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

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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		99.94%	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		0.94	1.08	Yes		
Chlorine	mg/L	5.0		0.89	1.73	Yes		
Copper	mg/L	2.0	95th percentile of test results less than respective ADWG health guideline	0.005	0.013	Yes		
Lead	mg/L	0.01	value	0.000	0.001	Yes		
Manganese	mg/L	0.5		0.002	0.010	Yes		
Trihalomethanes	mg/L	0.25		0.063	0.139	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
PFOS + PFHxS	ug/L	0.07	100% of test results less than respective ADWG health guideline	<0.004	0.004	Yes
PFOA	ug/L	0.56	value	<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		0.017	0.033	Yes
Aluminium	mg/L	0.2		0.034	0.051	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	0.003	0.003	Yes
Manganese	mg/L	0.1	value	0.002	0.005	Yes
Turbidity	NTU	5.0		0.2	0.4	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	7.59	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 Au Drinking Water Guidelines 2011 (ADWG).						
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 hea	alth 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 performand 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 performand standard
Fluoride	mg/L	1.5		1.00	1.10	Yes
Chlorine	mg/L	5.0		1.09	2.30	Yes
Copper	mg/L	2.0	95th percentile of test results less than	0.005	0.031	Yes
ead	mg/L	0.01	respective ADWG health guideline value	0.000	0.001	Yes
Manganese	mg/L	0.5		0.002	0.008	Yes
Րrihalomethanes Anna Bay and Nelson Bay Zone - PFOS, I	PFHxS & PFOA	0.25		0.020	0.083	Yes
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 performand standard
PFOS + PFHxS	ug/L	0.07	100% of test results less than	<0.004	<0.004	Yes
PFOA	ug/L	0.56	respective ADWG health guideline value	<0.002	<0.002	Yes
Anna Bay and Nelson Bay Zone - key aes	sthetic analytes					
Analyte	Units of measure	ADWG aesthetic guideline value	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performand standard
Iron	mg/L	0.3		0.018	0.032	Yes
Aluminium	mg/L	0.2		0.033	0.043	Yes
Copper	mg/L	1.0	Average of test results less than	0.005	0.008	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline value	0.003	0.004	Yes
Manganese	mg/L	0.1	·	0.002	0.003	Yes
Turbidity Colour-True	NTU HU	5.0 15.0		0.2 5	0.4 5	Yes Yes
			Average of test results between 6.5-9.2		3	165
pH	pH units	6.5-9.2	pH units	7.43	7.46	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	Met performand
E. coli					the last 12	standard
	MPN/100mL	Should not be detected in 100mL	At least 98% of test results <1		the last 12 months	
Analyte	MPN/100mL  Units of measure		At least 98% of test results <1  Performance standard (assessment over previous 12 months)	Average for Month	months	standard
		detected in 100mL	Performance standard (assessment		months 100.00%  95th Percentile over the last 12	Yes  Met performane
Fluoride Chlorine	Units of measure	ADWG health guideline value	Performance standard (assessment over previous 12 months)	Month	95th Percentile over the last 12 months	standard  Yes  Met performand standard
Fluoride Chlorine Copper	Units of measure  mg/L  mg/L  mg/L	ADWG health guideline value  1.5 5.0 2.0	Performance standard (assessment	0.96 1.00 0.006	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008	Yes  Met performant standard  Yes  Yes  Yes  Yes
Fluoride Chlorine Copper Lead	Units of measure  mg/L  mg/L  mg/L  mg/L	ADWG health guideline value  1.5  5.0  2.0  0.01	Performance standard (assessment over previous 12 months)  95th percentile of test results less than	0.96 1.00 0.006 0.000	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000	Yes  Met performand standard  Yes  Yes  Yes  Yes  Yes
Fluoride Chlorine Copper Lead Manganese	Units of measure  mg/L  mg/L  mg/L  mg/L  mg/L	ADWG health guideline value  1.5  5.0  2.0  0.01  0.5	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline	0.96 1.00 0.006 0.000 0.001	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.0004	Yes  Met performand standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes
Fluoride Chlorine Copper Lead Manganese Trihalomethanes	Units of measure  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L	ADWG health guideline value  1.5  5.0  2.0  0.01	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline	0.96 1.00 0.006 0.000	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000	Yes  Met performand standard  Yes  Yes  Yes  Yes  Yes
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA	Units of measure  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L	ADWG health guideline value  1.5  5.0  2.0  0.01  0.5	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline	0.96 1.00 0.006 0.000 0.001	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098	standard  Yes  Met performand standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA	Units of measure  mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)	Month  0.96  1.00  0.006  0.000  0.001  0.050  Average for Month	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098  Maximum detection over the last 12 months	Met performane standard  Yes  Mes Yes  Yes  Yes  Yes  Yes  Met performane standard
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte	Units of measure  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L  ug/L  ug/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline	0.96 1.00 0.006 0.000 0.001 0.050  Average for Month	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098  Maximum detection over the last 12 months <0.004	Met performand standard Yes
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L ug/L ug/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than	Month  0.96  1.00  0.006  0.000  0.001  0.050  Average for Month	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098  Maximum detection over the last 12 months	Met performand standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Met performand standard
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L ug/L ug/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.5 0.26	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value	Month  0.96  1.00  0.006  0.000  0.001  0.050  Average for Month  <0.004  <0.002	months	Met performant standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L ug/L ug/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline	0.96 1.00 0.006 0.000 0.001 0.050  Average for Month	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098  Maximum detection over the last 12 months <0.004	Met performant standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L  mg/L  ug/L  ug/L ug/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  0.07 0.56  ADWG aesthetic	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment	Month   0.96   1.00   0.006   0.000   0.001   0.050     Average for Month   <0.004   <0.002     Average for Average for Month	months 100.00%  95th Percentile over the last 12 months 1.00 1.41 0.008 0.000 0.004 0.098  Maximum detection over the last 12 months <0.004 <0.002	Met performant standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
Fluoride Chlorine Copper Lead Manganese Frihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte ron Muminium	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L  mg/L  ug/L  Units of measure  ug/L  ug/L  ug/L  ug/L  mg/L  Mg/L  Mg/L  Mg/L  Mg/L  Mg/L  Mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  0.07 0.56  ADWG aesthetic guideline value  0.3 0.2	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment	Month   0.96   1.00   0.006   0.000   0.001   0.050     Average for Month   <0.004   <0.002     Average for Month   0.013   0.036	months	Met performant standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte Iron Aluminium Copper	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L  ug/L  Units of measure  ug/L ug/L ug/L  ug/L  ug/L  ug/L  ug/L  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L  mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  0.07 0.56  ADWG aesthetic guideline value  0.3 0.2 1.0	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  Average of test results less than	Month	months	Met performant standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte Iron Aluminium Copper Zinc	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L  ug/L  Units of measure  Ug/L ug/L  ug/L  ug/L  mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  0.07 0.56  ADWG health guideline value  0.07 0.56	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)	Month   0.96   1.00   0.006   0.000   0.001   0.050	months   100.00%	Met performant standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Trihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte ron Aluminium Cupper Zinc Manganese	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L  mg/L  ug/L  Units of measure  Units of measure  ug/L  ug/L  ug/L  d  Units of measure  mg/L  mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value 0.65 0.26  ADWG health guideline value 0.07 0.56  ADWG aesthetic guideline value 0.3 0.2 1.0 3.0 0.1	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  Average of test results less than respective ADWG aesthetic guideline	Month   0.96   1.00   0.006   0.000   0.050	months   100.00%	Met performand standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Fluoride Chlorine Copper Lead Manganese Frihalomethanes Chichester Zone - PFOS, PFHxS & PFOA Analyte PFOS + PFHxS PFOA Chichester Zone - key aesthetic analytes Analyte ron Aluminium Copper Zinc Manganese Furbidity	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L  ug/L  Units of measure  Ug/L ug/L  ug/L  ug/L  mg/L	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value  0.07 0.56  ADWG aesthetic guideline value  0.3 0.2 1.0 3.0 0.1 5.0	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  Average of test results less than respective ADWG aesthetic guideline	Month   0.96   1.00   0.006   0.000   0.001   0.050	months   100.00%	Met performan standard  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye
Analyte  Chlorine Copper Lead Manganese Trihalomethanes  Chichester Zone - PFOS, PFHxS & PFOA  Analyte  PFOS + PFHxS  PFOA  Chichester Zone - key aesthetic analytes  Analyte  Iron Aluminium Copper Zinc Manganese Turbidity Colour-True	Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L  Units of measure  ug/L ug/L ug/L ug/L s  Units of measure  mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/	ADWG health guideline value  1.5 5.0 2.0 0.01 0.5 0.25  ADWG health guideline value 0.65 0.26  ADWG health guideline value 0.07 0.56  ADWG aesthetic guideline value 0.3 0.2 1.0 3.0 0.1	Performance standard (assessment over previous 12 months)  95th percentile of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  100% of test results less than respective ADWG health guideline value  Performance standard (assessment over previous 12 months)  Average of test results less than respective ADWG aesthetic guideline	Month   0.96   1.00   0.006   0.000   0.050	months	Met performand standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Met performand standard  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye

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		99.89%	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		0.97	1.00	Yes
Chlorine	mg/L	5.0		0.97	1.46	Yes
Copper	mg/L	2.0	95th percentile of test results less than	0.004	0.015	Yes
Lead	mg/L	0.01	respective ADWG health guideline	0.004	0.001	Yes
Manganese	mg/L	0.5	value	0.002	0.011	Yes
Trihalomethanes	mg/L					
Grahamstown Zone - PFOS, PFHxS & PFOA	mg/L	0.25		0.063	0.176	Yes
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 performand standard
PFOS + PFHxS	ug/L	0.07	100% of test results less than	<0.004	0.004	Yes
PFOA	ug/L	0.56	respective ADWG health guideline	<0.002	<0.002	Yes
Grahamstown Zone - key aesthetic analytes	ug/L	0.56	value	<0.002	<0.002	res
Granamstown Zone - key aestnetic analytes						
Analyte	Units of measure	ADWG aesthetic guideline value	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performanc standard
Iron	mg/L	0.3		0.018	0.025	Yes
Aluminium	mg/L	0.2		0.036	0.053	Yes
Copper	mg/L	1.0		0.004	0.005	Yes
Zinc	mg/L	3.0	Average of test results less than respective ADWG aesthetic guideline	0.002	0.003	Yes
Manganese	mg/L	0.1	value	0.002	0.005	Yes
<u> </u>	NTU					
Turbidity		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	7.51	7.54	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	1.08	1.33	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 results less than	<0.004	<0.004	Yes
PFOA			respective ADWG health guideline			
Gresford Zone - key aesthetic analytes	ug/L	0.56	value	<0.002	<0.002	Yes
Gresioru Zone - key destrietic andrytes						
Analyte	Units of measure	ADWG aesthetic guideline value	Performance standard (assessment over previous 12 months)	Average for Month	12 month average result	Met performanc standard
Turbidity	NTU	5.0	Average of test results less than respective ADWG aesthetic guideline value	0.1	0.2	Yes
pH	pH units		Average of test results between 6.5-9.2	8.41	8.46	Yes

Lemon Tree Passage Zone - key he	alth 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	MPN/100mL Should not be detected in 100mL			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		0.94	1.00	Yes
Chlorine	mg/L	5.0		1.13	1.83	Yes
Copper	mg/L	2.0	95th percentile of test results less than respective ADWG health guideline	0.007	0.010	Yes
Lead	mg/L	0.01	value	0.000	0.001	Yes
Manganese	mg/L	0.5		0.004	0.011	Yes
Trihalomethanes	mg/L	0.25		0.115	0.136	Yes
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 results less than	<0.004	<0.004	Yes
PFOA	ug/L	0.56	respective ADWG health guideline value	<0.002	<0.002	Yes
Lemon Tree Passage Zone - key ae	sthetic 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		0.029	0.042	Yes
Aluminium	mg/L	0.2	1	0.037	0.038	Yes
Copper	mg/L	1.0	Average of test results less than	0.007	0.005	Yes
Zinc	mg/L	3.0	respective ADWG aesthetic guideline	0.006	0.004	Yes
Manganese	mg/L	0.1	value	0.004	0.006	Yes
Turbidity	NTU	5.0		0.3	0.3	Yes
			1		1	

# PFOS, PFHxS and PFOA Results for Clear Water Tanks - August 2023

HU

pH units

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.

15.0

6.5-9.2

Average of test results between 6.5-9.2 pH units

7.51

7.53

Yes

Analyte	Units of measure	ADWG health guideline value	Anna Bay CWT	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
PFOA	ug/L	0.56	< 0.002	< 0.002	< 0.002	<0.002	<0.002

## PFOS, PFHxS and PFOA Results for Raw Waters - August 2023

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

Colour-True

^ 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.

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

<sup>#</sup> One sample is collected per month in the Gresford Zone