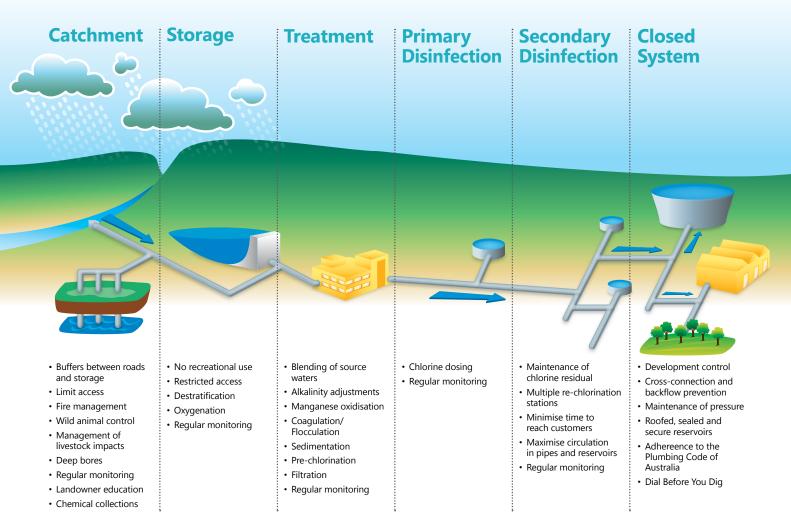
Annual Summary of Drinking Water Quality



1 July 2015 to 30 June 2016

MULTI-BARRIER APPROACH TO PROTECTING DRINKING WATER QUALITY



Our on-going drinking water quality management program is a holistic plan – starting at the catchment and ending at your tap. It involves a suite of capital works; maintenance, monitoring and operational strategies – along with communication initiatives – to protect, manage and maintain drinking water quality.

MONITORING DRINKING WATER QUALITY

We monitor water quality at every stage of the supply system to ensure you receive drinking water that meets the requirements of the Australian Drinking Water Guidelines 2011. In addition to online monitoring of critical treatment processes, water samples are taken from the catchment, before and after water treatment plants, from reservoirs and the reticulation system before entering homes. All samples are tested by Council and/or independent laboratories registered with the National Association of Testing Authorities.

The results presented in this report are from samples obtained from customer taps throughout the supply system to verify that the water supplied to homes and businesses meets the quality requirements of the Australian Drinking Water Guidelines 2011.

WHAT'S TESTED?

Your water is regularly tested for a range of physical, chemical and biological characteristics in accordance with the NSW Health Drinking Water Monitoring Program.

Event specific and research monitoring is also undertaken as required. This report provides a summary of the key parameters regularly tested by Council and NSW Health.

PERFORMANCE SUMMARY

From 1 July 2015 to 30 June 2016, your water quality complied with the Australian Drinking Water Guidelines 2011.

I WATER QUALITY TEST RESULTS

North (former Wyong LGA): 1 July 2015 To 30 June 2016

Microbiological sampling and analysis					
Parameter	Guideline Value ¹	Guideline Basis	Result	Number of Samples	
E.coli	100% of test results contain no <i>E.coli</i>	Health	100% of test results contain no <i>E.coli</i>	416	

Parameter	Units of measure	Guideline Value ¹	Guideline Basis	Average	Number of Samples		
PHYSICAL							
True Colour	HU	15	Aesthetic	1.9	12		
		15			12		
Turbidity	NTU	5	Aesthetic	0.25	12		
Total Dissolved Solids (TDS)	mg/L	600	Aesthetic	152	12		
Total Hardness as CaCO ₃	mg/L	200 Aesthetic		69	12		
CHEMICAL							
Aluminium	mg/L	0.2	Aesthetic	0.04	12		
Antimony	mg/L	0.003	Health	0.0005	12		
Arsenic	mg/L	0.01	Health	0.0008	12		
Barium	mg/L	2	Health	0.03	12		
Boron	mg/L	4	Health	0.05	12		
Cadmium	mg/L	0.002	Health	0.0003	12		
Calcium	mg/L	N/A	N/A	20	12		
Chloride	mg/L	250	Aesthetic	54	12		
Chlorine	mg/L	5 (0.6)	Health (Aesthetic)	0.78	435		
Chromium	mg/L	0.05	Health	0.0025	12		
Copper	mg/L	2 (1)	Health (Aesthetic)	0.05	12		
Fluoride	mg/L	1.5	Health	0.93	12		
Iodine	mg/L	0.5	Health	0.02	12		
Iron	mg/L	0.3	Health	0.02	12		
Lead	mg/L	0.01	Health	0.001	12		
Magnesium	mg/L	N/A	N/A	4.6	12		
Manganese	mg/L	0.5 (0.1)	Health (Aesthetic)	0.01	12		
Mercury	mg/L	0.001	Health	0.0001	12		
Molybdenum	mg/L	0.05	Health	0.0025	12		
Nickel	mg/L	0.02	Health	0.005	12		
Nitrate	mg/L	50	Health	1.2	12		
Nitrite	mg/L	3	Health	0.05	12		
рН	pH units	6.5-8.5	Health	7.5	12		
Selenium	mg/L	0.01	Health	0.001	12		
Silver	mg/L	0.1	Health	0.001	12		
Sodium	mg/L	180	Health	25	12		
Sulfate	mg/L	500 (250)	Health (Aesthetic)	24	12		
Zinc	mg/L	3	Health	0.02	12		

¹ Australian Drinking Water Guidelines 2011. H.U = Hazen Units. N.T.U = Nephelometric Turbidity Units. mg/L = milligrams per litre (or parts per million). NA = not applicable. The Australian Drinking Water Guidelines 2011 recognise that occasionally throughout the year there may be health or aesthetic related test results above the Guidelines values, and that these results are not necessarily an immediate threat to health. As such, the Guidelines do not require a 100 per cent result in all cases, with the exception of Ecoli. Each test result above the guideline value for E coli is investigated and actions taken where necessary to minimise the risk of a recurrence. Disturbances and operational changes can result in occasional localised elevated levels of aesthetic water quality characteristics such as pH.

South (former Gosford LGA): 1 July 2015 To 30 June 2016

Microbiological sampling and analysis						
Parameter	Guideline Value ¹	Guideline Basis	deline Basis Result Number of Sa			
E.coli	100% of test results contain no <i>E.coli</i>	Health	100% of test results contain no <i>E.coli</i>	398		

Physical sampling and analysis							
Parameter	Units of measure	Guideline Value ¹	Guideline Basis	Number of Samples	Average	95th percentile	
PHYSICAL							
True Colour	HU	15	Aesthetic	12	2	4	
Turbidity	NTU	5	Aesthetic	12	0.4	1.3	
Total Dissolved Solids (TDS)	mg/L	600	Aesthetic	12	145	168	
Total Hardness as CaCO ₃	mg/L	200	Aesthetic	12	51	73	
CHEMICAL							
Aluminium	mg/L	0.2	Aesthetic	12	0.02	0.03	
Antimony	mg/L	0.003	Health	12	<0.001	<0.001	
Arsenic	mg/L	0.01	Health	12	<0.001	0.001	
Barium	mg/L	2	Health	12	0.020	0.034	
Boron	mg/L	4	Health	12	<0.1	0.1	
Cadmium	mg/L	0.002	Health	12	<0.0005	<0.0005	
Calcium	mg/L	N/A	N/A	12	14	23	
Chloride	mg/L	250	Aesthetic	12	40	57	
Chlorine (Total)	mg/L	5	Health	398	0.93	1.76	
Chromium	mg/L	0.05	Health	12	<0.005	<0.005	
Copper	mg/L	2 (1)	Health (Aesthetic)	12	0.049	0.11	
Fluoride	mg/L	1.5	Health	12	0.88	1.1	
Iodine	mg/L	0.5	Health	12	<0.02	0.02	
Iron	mg/L	0.3	Health	12	0.01	0.02	
Lead	mg/L	0.01	Health	12	<0.002	<0.002	
Magnesium	mg/L	N/A	N/A	12	3.7	5.1	
Manganese	mg/L	0.5 (0.1)	Health (Aesthetic)	12	0.009	0.014	
Mercury	mg/L	0.001	Health	12	0.0001	0.0003	
Molybdenum	mg/L	0.05	Health	12	<0.005	<0.005	
Nickel*	mg/L	0.02	Health	12	0.01	0.03	
Nitrate	mg/L	50	Health	12	2.0	3.8	
Nitrite	mg/L	3	Health	12	<0.1	<0.1	
рН	pH units	6.5-8.5	Health	12	7.5	7.8	
Selenium	mg/L	0.01	Health	12	<0.002	0.002	
Silver	mg/L	0.1	Health	12	<0.002	<0.002	
Sodium	mg/L	180	Health	12	29	38	
Sulfate	mg/L	500 (250)	Health (Aesthetic)	12	32	59	
Zinc	mg/L	3	Health	12	0.02	0.04	

¹ Australian Drinking Water Guidelines 2011. H.U = Hazen Units. N.TU = Nephelometric Turbidity Units. mg/L = milligrams per littre (or parts per million). NA = not applicable. The Australian Drinking Water Guidelines 2011 recognise that occasionally throughout the year there may be health or aesthetic related test results above the Guidelines values, and that these results are not necessarily an immediate threat to health. As such, the Guidelines do not require a 100 per cent result in all cases, with the exception of Ecoli. Each test result above the guideline value for E coli is investigated and actions taken where necessary to minimise the risk of a recurrence. Disturbances and operational changes can result in occasional localised elevated levels of oesthetic water quality characteristics such as pH.

*Nicket Levels of nickel greater that the guideline value of 0.02 mg/L were detected in the July 2015 water sample. Investigations showed that nickel was coming from the tap fitting at that sampling point. The tap fitting has been replaced, and subsequent results have been below the guideline value.