Blackall-Tambo Regional Council

BLACKALL-TAMBO REGIONAL COUNCIL
DWQMP ANNUAL REPORT
1 July 2024 – 30 June 2025

Service Provider #475

GBA CONSULTING ENGINEERS

Document Control

Date	Description	Author
03/12/2024	Initial Draft	Meg Arnold
15/12/2025	Review	Alison Lamb
16/12/2025	Report Released to Client	Isabeau Gavel
19/01/2026	Updated in Response to Regulator Review	Isabeau Gavel

GBA Project/Doc ID no. **190163 /527448**

Contact for enquiries and proposed changes

If you have any questions regarding this document or if you have a suggestion for improvements, please contact GBA Consulting Engineers.

Phone 07 4651 5177
Email admin@gbaengineers.com.au

CONTENTS

TABLES

1.0 INTRODUCTION

This is the Drinking Water Quality Management Plan (DWQMP) Annual Report for Blackall-Tambo Regional Council (BTRC) for the 2024-2025 Financial Year. This report documents the performance of BTRC's drinking water service with respect to water quality and performance in implementing the actions detailed in Council's DWQMP, as required under the *Water Supply (Safety and Reliability) Act 2008*. This annual report will assist the Regulator in determining whether the approved DWQMP (including any approval conditions) have been complied with. It also provides a mechanism for service providers to publicly report on their performance in managing drinking water quality.

BTRC operates under an approved DWQMP to ensure the consistent supply of safe and reliable drinking water services. This is achieved through proactive identification and a risk management approach to public health-related risks associated with Council's drinking water schemes.

This annual report includes the following:

- Activities undertaken over the financial year in operating Council's drinking water services;
- A summary of the drinking water data for Blackall and Tambo;
- A summary of Council's performance in implementing the approved DWQMP;
- Incidents reported to the Regulator;
- Customer complaints;
- Review outcomes and audit findings.

This report will be accessible to the public through the BTRC website or upon request at any of Council's offices.

2.0 SUMMARY OF THE SCHEMES OPERATED

BTRC is a medium Drinking Water Service Provider as defined in the *Water Supply (Safety and Reliability) Act 2008*. BTRC covers an area of approximately 30,502 km^2 and has an overall population of around 2,180 people, which swells during the cooler months due to travelling tourists. There are two operational water supply schemes in the region, located in the towns of Blackall and Tambo. The region's administration centre is located in Blackall. Both water supply schemes rely on bores extracting water from the Great Artesian Basin.

The Blackall water supply scheme sources water from three artesian bores. All three bores draw water which flows under positive pressure directly into the distribution system. No water treatment is required for Blackall's drinking water as the source water generally complies with the Australian Drinking Water Guidelines (ADWG).

The Tambo water supply scheme sources its water from three artesian bores and one sub-artesian bore. Of these four bores, the Williams Street and Council Depot bores are the primary bores used to supply the town with drinking water. Bore 5 (Truck Fill Bore) is primarily used as a watering point for Council trucks and to provide the sports oval complex with drinking water; however, it is connected to the rest of the Tambo distribution system and can supply drinking water to the entire town as required. The Golf Club bore is a sub-artesian, stand-alone bore located approximately 4.4km north of Tambo. This bore supplies the Golf Club with drinking water; it is currently not possible for this bore to be connected to the rest of the Tambo distribution system. The three bores in Tambo draw water that flows under positive pressure, while the Golf Club bore requires a pump to draw water. Similarly to Blackall, Tambo's source water generally complies with the ADWG and as such, the water does not undergo any treatment before being distributed to customers.

Table 1: Summary of the BTRC schemes.

Scheme	Water Source	Treatment	Pop. Served	No. Conns	Demand
Blackall	Artesian Bore Water	None	1,560	793	3.34 ML/d
Tambo	Artesian Bore Water & Sub-Artesian Bore Water	None	620	239	0.76 ML/d

3.0 DWQMP IMPLEMENTATION

Implementing BTRC's DWQMP has provided Council with an operational framework to manage the drinking water supply systems of Blackall and Tambo to ensure the supply of safe drinking water for the region.

The Risk Management Improvement Programme (RMIP) outlined in the BTRC DWQMP is an integral part of Council's operation of the two schemes and has been a priority for Council during the reporting period. Table 2 below provides a status summary of Council's RMIP.

Table 2: Blackall and Tambo risk management improvement programme implementation status.

RMIP Code	Scheme	Hazard/Hazardous Event	Improvement Actions	Target Date	Comments	Status / Revised Target Date	Responsible Officer
BT1	Blackall / Tambo	Pathogenic ingress	Implement monthly turbidity testing to accurately trend water turbidity values and associated risks.	Dec 24	Turbidity meters were purchased in November 2023. Operational monitoring was implemented in February 2024 for both schemes and has been undertaken consistently since then.	Completed.	Director, Organisational Performance
BT2	Blackall / Tambo	Mains Breaks / Ageing Infrastructure	Asset renewal programme.	Dec 24	Ageing mains were replaced on the following Blackall streets: - Hawthorn St to Daisy St - Ticklebelly Gully to Garden St intersection - On Hawthorn St from Thistle St to Rose St - On Shamrock St from St Andrews St to Myrtle St - On Mulga St from Rose St to Ivy St - On Ivy St from Hawthorn St to Silvia St Council are continuing to budget the replacement of AC mains, however, this will be a long-term job.	Ongoing	Director, Organisational Performance
BT4	Blackall / Tambo	Pathogenic ingress	Upgrade the water testing lab located at the Blackall Depot	June 2025	Dust and clutter have been removed from the current lab area and the area is now used exclusively for water sampling. Council has commenced budget discussions for the 25/26 FY and an allocation of fund will be included in this budget for the water testing laboratory.	Ongoing	Director, Organisational Performance

4.0 WATER QUALITY MONITORING – COMPLIANCE WITH QUALITY CRITERIA

In Blackall, operational monitoring is conducted on a weekly basis and in Tambo, monitoring is conducted at monthly intervals. Council also send out water samples to an external laboratory three times a year for distribution system testing and annually for source water testing.

It should be noted that the ADWG were updated in July 2025 to include new health values for Lead, Manganese and Selenium. As this update occurred during the 2025-26 financial year, the old ADWG values for these parameters will be used in the below water quality data analysis.

Sections 4.1 and 4.2 below summarises all verification and operational monitoring for the Blackall and Tambo schemes undertaken during the reporting period, while Section 4.3. outlines any potential water quality issues encountered by Council.

4.1. Blackall Drinking Water Quality Summary 2024-2025 Financial Year

Table 3: Blackall annual source water verification monitoring results.

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E. coli	MPN/100ml	3	5	0	0	0	0	0	1	0		
Total Coliforms	MPN/100mL	3	5	0	0	0	0	0				
Heterotrophic Plate Count	CFU/mL	3	5	50	22	10	16	46				
Conductivity	µS/cm	3	5	414	394.6	373	15	413				
True Colour	HU	3	5	1	1	1	0	1			15	0
Total Hardness	mg/L	3	5	22	18	9	4.6	21.6			200	0
pH	pH Units	3	5	8.6	8.46	8.3	0.102	8.58			≥6.5 & ≤8.5	1
Total Dissolved Solids	mg/L	3	5	274	253	238	12.68	270.6			600	0
Total Dissolved Ions	mg/L	3	5	331	308	291	13.62	327				
Turbidity	NTU	3	5	0.24	0.168	0.15	0.036	0.222			5	0
Chloride	mg/L	3	5	39.5	33.88	28.7	4.42	39.36			250	0
Nitrate	mg/L	3	5	0.5	0.26	0.1	0.2	0.5	50	0		
Nitrite	mg/L	3	5	0.5	0.26	0.1	0.2	0.5	3	0		
Calcium	mg/L	3	5	8.2	7.022	3.74	1.67	8.18				

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Magnesium	mg/L	3	5	0.5	0.396	0.21	0.129	0.5				
Potassium	mg/L	3	5	5.1	4.16	2.1	1.07	5.04				
Silica	mg/L	3	5	34	32	30	1.41	33.8			80	0
Sodium	mg/L	3	5	94.8	82	74	7.26	92.78			180	0
Sulphate	mg/L	3	5	8	7.2	6	0.75	8			250	0
Phosphate	mg/L	3	5	0.02	0.02	0.02	0	0.02				
Total Iron	mg/L	3	5	0.016	0.0114	0.01	0.002	0.015			0.3	0
Total Manganese	mg/L	3	5	0.036	0.0194	0.003	0.013	0.0352	0.5	0	0.1	0
Fluoride	mg/L	3	2	0.5	0.5	0.5	0	0.5	1.5	0		
Arsenic	mg/L	3	5	0.0013	0.001	0.0009	0.0001	0.0013	0.01	0		
Cadmium	mg/L	3	5	0.0004	0.00022	0.0001	0.0001	0.0004	0.002	0		
Chromium	mg/L	3	5	0.0005	0.00042	0.0003	0	0.0005	0.05	0		
Copper	mg/L	3	5	0.002	0.0015	0.001	0.0005	0.002	2	0	1	0
Mercury	mg/L	3	5	0.0004	0.00022	0.0001	0.0001	0.0004	0.001	0		
Lead	mg/L	3	5	0.00029	0.0002	0.0001	0	0.0003	0.01	0		
Nickel	mg/L	3	5	0.001	0.0007	0.0005	0.0002	0.001	0.02	0		
Zinc	mg/L	3	5	0.01	0.007	0.005	0.0024	0.01	3	0		

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Uranium	mg/L	3	3	0.0001	0.0001	0.0001	0	0.0001	0.017	0		
Gross Alpha	Bq/L	3	3	0.1	0.1	0.1	0	0.1			0.5	0
Gross Beta	Bq/L	3	3	0.1	0.1	0.1	0	0.1			0.5	0
Aesthetic Guideline Exceedance												
Health Guideline Exceedance												

Table 4: Blackall tri-annual distribution system verification monitoring results.

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E. coli	MPN/100ml	9	4	0	0	0	0	0	1	0		
Total Coliforms	MPN/100mL	9	4	0	0	0	0	0				
Heterotrophic Plate Count	CFU/mL	9	4	20	13.75	10	4.15	19.25				
Conductivity	µS/cm	9	4	407	399.25	392	5.49	406.1				
True Colour	HU	9	4	1	1	1	0	1			15	0
Total Hardness	mg/L	9	4	21	14.25	9	5.36	20.55			200	0
pH	pH Units	9	4	8.39	8.36	8.3	0.035	8.39			≥6.5 & ≤8.5	0
Total Dissolved Solids	mg/L	9	4	268	262	252	6.63	268			600	0
Turbidity	NTU	9	4	0.15	0.15	0.15	0	0.15			5	0
Chloride	mg/L	9	4	39.2	36.33	32.7	2.56	39.05			250	0
Nitrate	mg/L	9	4	0.9	0.45	0.1	0.357	0.87	50	0		
Nitrite	mg/L	9	4	0.5	0.2	0.1	0.173	0.44	3	0		
Calcium	mg/L	9	4	7.92	5.54	3.5	2	7.8				
Magnesium	mg/L	9	4	0.238	0.21	0.2	0.016	0.23				
Potassium	mg/L	9	4	4.7	3.275	2	1.19	4.63				

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Silica	mg/L	9	4	33	32.25	31	0.83	33			80	0
Sodium	mg/L	9	4	97.2	88.3	79.9	7.05	96.57			180	0
Sulphate	mg/L	9	4	8	7.25	7	0.433	7.85			250	0
Phosphate	mg/L	9	4	0.03	0.028	0.02	0.0043	0.03				
Total Iron	mg/L	9	4	0.01	0.01	0.01	0	0.01			0.3	0
Total Manganese	mg/L	9	4	0.033	0.0123	0.002	0.013	0.03	0.5	0	0.1	0
Fluoride	mg/L	9	4	0.5	0.275	0.2	0.13	0.455	1.5	0		
Arsenic	mg/L	9	4	0.0013	0.0012	0.0011	0	0.0013	0.01	0		
Cadmium	mg/L	9	4	0.0004	0.0004	0.0004	0	0.0004	0.002	0		
Chromium	mg/L	9	4	0.0004	0.00033	0.0003	0	0.00039	0.05	0		
Copper	mg/L	9	4	0.07	0.0285	0.002	0.00285	0.0655	2	0	1	0
Mercury	mg/L	9	4	0.0004	0.0004	0.0004	0	0.0004	0.001	0		
Lead	mg/L	9	4	0.0008	0.00035	0.0002	0.0003	0.0007	0.01	0		
Nickel	mg/L	9	4	0.001	0.001	0.001	0	0.001	0.02	0		
Zinc	mg/L	9	4	0.01	0.01	0.01	0	0.01	3	0		
Aesthetic Guideline Exceedance												
Health Guideline Exceedance												

Table 5: Blackall operational monitoring results – distribution system.

Parameters	Units	Sampling Frequency	No. of Samples to be Tested as per DWQMP	No. of Samples Tested in FY	Summary of Results					ADWG Value			
					Max Value	Mean Value	Min Value	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	Weekly	260	230	0	0	0	0	0	1	0		
Turbidity	NTU	Weekly	260	230	2.8	0.33	0	0.4	1.131			5	0
Temperature	°C	Weekly	260	110	37	26.8	30	3.74	32.55				
Aesthetic Guideline Exceedance													
Health Guideline Exceedance													

Table 6: Blackall *E.coli* Annual Value Compliance Table – 2024-25 Financial Year.

Year	1/07/2024-30/06/2025											
Month	*July*	*August*	*September*	*October*	*November*	*December*	*January*	*February*	*March*	*April*	*May*	*June*
No. of samples collected	25	20	20	25	23	5	20	20	20	20	15	16
No. of samples collected in which *E.coli* is detected	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in the previous 12-month period	271	268	268	268	268	255	251	246	246	246	233	229
No. failures for the previous 12-month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with 98% annual value	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

4.2. Tambo Drinking Water Quality Summary 2024-2025 Financial Year

Table 7: Tambo annual source water verification monitoring results.

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E. coli	MPN/100ml	4	6	2	0.33	0	0.75	1.5	1	1		
Total Coliforms	MPN/100mL	4	6	2	0.33	0	0.75	1.5				
Heterotrophic Plate Count	CFU/mL	4	6	55	18.3	10	16.5	45				
Conductivity	µS/cm	4	6	900	328.7	208	255.67	730.75				
True Colour	HU	4	6	19	6.83	1	6.69	17			15	1
Total Hardness	mg/L	4	6	44	34.5	24	6.53	43			200	0
pH	pH Units	4	6	7.7	7.18	6.8	0.31	7.6			≥6.5 & ≤8.5	0
Total Dissolved Solids	mg/L	4	6	520	202.33	127	142.22	426.75			600	0
Total Dissolved Ions	mg/L	4	6	615	238.5	150	168.56	504.25				
Turbidity	NTU	4	6	30	11.58	1.5	13.05	30			5	2
Chloride	mg/L	4	6	168	43.1	15.2	55.88	131			250	0
Nitrate	mg/L	4	6	0.5	0.23	0.1	0.19	0.5	50	0		
Nitrite	mg/L	4	6	0.5	0.23	0.1	0.19	0.5	3	0		
Calcium	mg/L	4	6	13.7	7.22	4.56	3.02	12.135				

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Magnesium	mg/L	4	6	6.24	4	1.33	1.54	5.9				
Potassium	mg/L	4	6	10.2	8.5	6.9	1.2	10.025				
Silica	mg/L	4	6	23	21	16	2.3	22.75			80	0
Sodium	mg/L	4	6	179	54.28	20.5	56	143.15			180	0
Sulphate	mg/L	4	6	28	9.5	4	8.32	22.75			250	0
Phosphate	mg/L	4	6	0.04	0.025	0.02	0.008	0.038				
Total Iron	mg/L	4	6	4.56	1.91	0.77	1.48	4.25			0.3	6
Total Manganese	mg/L	4	6	0.13	0.058	0.037	0.032	0.11	0.5	0	0.1	1
Fluoride	mg/L	4	2	0.5	0.5	0.5	0	0.5	1.5	0		
Arsenic	mg/L	4	6	0.00052	0.0004	0.0002	0.0001	0.0005	0.01	0		
Cadmium	mg/L	4	6	0.0004	0.0002	0.0001	0.0001	0.0004	0.002	0		
Chromium	mg/L	4	6	0.0005	0.0004	0.0003	0	0.0005	0.05	0		
Copper	mg/L	4	6	0.14	0.026	0.001	0.051	0.11	2	0	1	0
Mercury	mg/L	4	6	0.0004	0.0002	0.0001	0.0001	0.0004	0.001	0		
Lead	mg/L	4	6	0.01	0.002	0.0001	0.0036	0.008	0.01	0		
Nickel	mg/L	4	6	0.001	0.0007	0.0005	0.0002	0.001	0.02	0		
Zinc	mg/L	4	6	0.35	0.068	0.005	0.13	0.27	3	0		

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Uranium	mg/L	4	4	0.0001	0.0001	0.0001	0	0.0001	0.017	0		
Gross Alpha	Bq/L	4	4	0.5±0.2	0.35±0.2	0.1±0.1	0.15±0.04	0.49±0.2			0.5	3
Gross Beta	Bq/L	4	4	0.2±0.3	0.15±0.3	0.1±0.3	0.05±0.3	0.2±0.3			0.5	0
Aesthetic Guideline Exceedance												
Health Guideline Exceedance												

Table 8: Tambo distribution system verification monitoring results.

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E. coli	MPN/100ml	9	4	0	0	0	0	0	1	0		
Total Coliforms	MPN/100mL	9	4	1	0.25	0	0.433	0.85				
Heterotrophic Plate Count	CFU/mL	9	4	110	37.5	10	42.06	96.5				
Conductivity	µS/cm	9	4	227	222.25	219	2.95	226.25				
True Colour	HU	9	4	19	7	1	7.18	17.05			15	1
Total Hardness	mg/L	9	4	34	29.75	28	2.49	33.25			200	0
pH	pH Units	9	4	7.3	7	6.77	0.21	7.3			≥6.5 & ≤8.5	0
Total Dissolved Solids	mg/L	9	4	149	146	143	2.24	148.7			600	0
Total Dissolved Ions	mg/L	9	4	176	172	170	2.45	175.4				
Turbidity	NTU	9	4	2.5	1.9	1	0.56	2.5			5	0
Chloride	mg/L	9	4	22.3	20.43	18.6	1.4	22.1			250	0
Nitrate	mg/L	9	4	0.5	0.33	0.1	0.179	0.5	50	0		
Nitrite	mg/L	9	4	0.5	0.2	0.1	0.173	0.44	3	0		
Calcium	mg/L	9	4	6.06	5.52	5.23	0.32	6				
Magnesium	mg/L	9	4	4.5	3.85	3.55	0.38	4.39				

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Potassium	mg/L	9	4	9.7	8.9	8.4	0.49	9.58				
Silica	mg/L	9	4	22	21.25	21	0.433	21.85			80	0
Sodium	mg/L	9	4	35.2	33	29.5	2.12	34.99			180	0
Sulphate	mg/L	9	4	7	6.75	6	0.433	7			250	0
Phosphate	mg/L	9	4	0.05	0.028	0.02	0.013	0.046				
Total Iron	mg/L	9	4	1.03	0.72	0.107	0.36	1.011			0.3	4
Total Manganese	mg/L	9	4	0.045	0.0445	0.044	0.0005	0.045	0.5	0	0.1	0
Fluoride	mg/L	9	4	0.5	0.2	0.1	0.173	0.44	1.5	0		
Arsenic	mg/L	9	4	0.0002	0.0002	0.0002	0	0.0002	0.01	0		
Cadmium	mg/L	9	4	0.0004	0.0004	0.0004	0	0.0004	0.002	0		
Chromium	mg/L	9	4	0.0003	0.0003	0.0003	0	0.0003	0.05	0		
Copper	mg/L	9	4	0.12	0.041	0.002	0.048	0.108	2	0	1	0
Mercury	mg/L	9	4	0.0004	0.0004	0.0004	0	0.0004	0.001	0		
Lead	mg/L	9	4	0.0036	0.0012	0.0002	0.0014	0.003	0.01	0		
Nickel	mg/L	9	4	0.001	0.001	0.001	0	0.001	0.02	0		
Zinc	mg/L	9	4	0.044	0.019	0.01	0.015	0.0389	3	0		
Aesthetic Guideline Exceedance												

Analyte	Units	Samples to be Tested as per DWQMP	Summary of Results						Guideline Values			
			Samples Tested	Maximum Value	Mean Value	Minimum Values	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
Health Guideline Exceedance												

Table 9: Tambo operational monitoring – distribution system.

Parameters	Units	Sampling Frequency	No. of Samples to be Tested as per DWQMP	No. of Samples Tested in FY	Summary of Results					ADWG Value			
					Max Value	Mean Value	Min Value	Std Dev	95th %	Health	Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	Monthly	60	95	0	0	0	0	0	1	0		
Turbidity	NTU	Monthly	60	130	2.85	0.39	0	0.399	1.11			5	0
Temperature	°C	Monthly	60	37	39	25.3	16.29	4.56	33.28				
Aesthetic Guideline Exceedance													
Health Guideline Exceedance													

Table 10: Tambo *E.coli* Annual Value Compliance Table – 2024-2025 Financial Year.

Year	1/07/2024-30/06/2025											
Month	*July*	*August*	*September*	*October*	*November*	*December*	*January*	*February*	*March*	*April*	*May*	*June*
No. of samples collected	6	6	6	6	6	5	10	10	10	10	10	10
No. of samples collected in which *E.coli* is detected	0	0	0	0	0	0	0	0	0	0	0	1
No. of samples collected in the previous 12-month period	73	71	77	78	78	77	81	82	86	90	91	95
No. failures for the previous 12-month period	0	0	0	0	0	0	0	0	0	0	0	1
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%
Compliance with 98% annual value	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

4.3. Blackall and Tambo Verification and Operational Monitoring Summary

4.3.1. Blackall

The following ADWG aesthetic exceedances were identified in Blackall's source water during the reporting period:

- pH (verification monitoring; 1 exceedance from 5 samples)

There were no ADWG health exceedances identified within the Blackall scheme during the reporting period.

4.3.2. Tambo

The following ADWG aesthetic exceedances were reported in Tambo's source water during the reporting period:

- True Colour (verification monitoring; 1 exceedance from 6 samples)
- Turbidity (verification monitoring; 2 exceedances from 6 samples)
- Total Iron (verification monitoring; 6 exceedances from 6 samples)
- Total Manganese (verification monitoring; 1 exceedance from 6 samples)
- Gross Alpha (verification monitoring; 3 exceedances from 4 samples)

The following ADWG aesthetic exceedances were identified in Tambo's distribution system:

- True Colour (verification monitoring; 1 exceedance from 4 samples)
- Total Iron (verification monitoring; 4 exceedances from 4 samples)

The following ADWG health exceedances were identified in Tambo's source water:

- *E.coli* (verification monitoring; 1 exceedance from 6 samples)

4.4. Summary of Water Quality Within the Schemes

4.4.1. Blackall

As previously mentioned, Blackall's source water generally complies with the ADWGs and as such, does not undergo any treatment prior to its distribution to customers. However, ADWG aesthetic exceedances were identified within Blackall's source water for pH. Elevated pH levels are common in Blackall's drinking water, caused by the dissolution of minerals associated with the underlying geology of the area. No ADWG health value has been set for pH as elevated levels are generally only associated with taste issues and pipe scaling and therefore, exceedances are not considered a hazard for the scheme. It should also be noted that the average pH within Blackall's distribution system sits at around 8.3 pH Units, under the ADWG upper aesthetic of 8.5.

4.4.2. Tambo

Similar to Blackall, Tambo's drinking water does not undergo any treatment prior to its distribution to customers. Nonetheless, some ADWG aesthetic exceedances were identified within Tambo's source and distribution water during the reporting period. These include exceedances for True Colour, Turbidity, Total Iron, Total Manganese, and Gross Alpha.

Elevated concentrations of Iron in Tambo's source water are common, caused by the underlying geology of the area. In the past, elevated Iron has also been found to impact other parameters, such as Turbidity, resulting in occasional exceedances above the ADWG aesthetic. It is likely that the Turbidity exceedances identified in Tambo's source water during the reporting period were caused by the elevated Iron concentrations. Elevated Iron concentrations are not a huge concern in drinking water; however, they

can cause taste issues in addition to staining of laundry and plumbing fittings, fouling of ion-exchange softeners and blockages in irrigation systems.

Similarly, the Total Manganese exceedance is not considered a concern for the scheme as elevations above the ADWG aesthetic for Manganese are associated with an undesirable taste in the water and stains on plumbing fixtures and laundry. Moreover, the average concentration of Manganese in Tambo's distribution system for the reporting period was 0.058mg/L, which is under the ADWG aesthetic of 0.1mg/L. Additionally, the exceedance was reported at the Golf Club Bore which is a stand alone bore that only supplies drinking water to the Golf Club.

The Gross Alpha exceedances can also be attributed to the underlying geology of the area. When the three exceedances were first identified, the testing laboratory undertook further analyses of the samples, which identified Radium-226 and Radium-228 concentrations to be under the ADWG screening value of 0.5 Bq/L. As such, elevated Gross Alpha concentrations are not considered to be a major hazard for the scheme.

The *E.coli* ADWG health exceedance is discussed in more detail in Section 5 below.

4.5. *E.coli* Verification and Operational Monitoring

Bacteriological sampling within Blackall and Tambo's distribution systems recorded no positive *E.coli* results for the reporting period. Therefore, both schemes have been compliant with the 98% *E.coli* value for the 2024-2025 Financial Year and are therefore compliant with Section 52(4) of the *Public Health Regulation 2018*.

4.6. Missed Verification and Operational Monitoring

Council missed one round of tri-annual verification monitoring in September 2024. Missed testing can be attributed to a changeover in staff responsibilities. Moving forward, Council will ensure that all operational and verification monitoring is undertaken as per their approved DWQMP.

5.0 INCIDENTS REPORTED TO THE REGULATOR

There were two drinking water incidents reported to the Regulator during the reporting period, as detailed in Table 11 below.

Table 11: Water Quality Incidents reported to the Regulator for the 2024-2025 Financial Year.

Incident Date	Scheme	Issue	Preventative Actions
9/12/2024	Tambo	Gross Alpha exceedances within Tambo's source water. Samples taken: 3/07/2024	Follow-up radionuclide monitoring for Radium-226 and Radium-228 was found to be within the ADWG and therefore, the Gross Alpha exceedances are not considered to be a concern for the scheme. Radionuclide sampling is provided in Table 12 below.
21/11/2025	Tambo	Verification monitoring *E.coli* detection at the William's Street Bore in Tambo. Sample taken: 18/06/2025	In-house operational monitoring undertaken at the same time did not detect *E.coli* within the Tambo scheme. Additionally, the water sample was not tested by the external lab within the 24-hr *E.coli* holding period. As such, the detection was determined by Council to be a false positive.

Table 12: Tambo source water radionuclide sampling.

Parameters	Units	Radium-226	Radium-228
Tambo Depot Bore	mBq/L	90±20	120±60
Tambo Williams St Bore	mBq/L	90±20	180±70
Tambo Truck Fill Bore	mBq/L	90±20	120±60

6.0 CUSTOMER COMPLAINTS REGARDING WATER QUALITY

There were no customer complaints regarding drinking water quality during the 2024-25 financial year.

7.0 DWQMP REVIEW OUTCOMES

The last DWQMP Review was conducted in October 2025 and submitted to the Regulator on 31/10/2025. As this was undertaken during the 2025-26 financial year, review outcomes will be detailed in the 2025-26 Annual Report.

8.0 DWQMP AUDIT FINDINGS AND RECOMMENDATIONS

The last formal audit of Council's DWQMP was completed in April 2022. The audit findings and recommendations were incorporated into the 2022 DWQMP Amendment. The next audit is scheduled for completion in 2026.

9.0 BTRC CUSTOMER SERVICE STANDARDS REVIEW

Council's Customer Service Standards were last reviewed in April 2024. The next review has been scheduled by Council for early 2026.