

# DSC DWQMP ANNUAL REPORT 1 July 2024 - 30 June 2025

Drinking Water Service Provider ID - 42



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#### 1.0 INTRODUCTION

This is the Drinking Water Quality Management Plan (DWQMP) Annual Report for Diamantina Shire Council (DSC) for the 2024-2025 Financial Year. 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.

DSC is a registered Service Provider with Identification (SPID) number 42. It operates under an approved DWQMP to ensure a consistent supply of safe, quality drinking water. This is done through proactive identification and minimisation of public health-related risks associated with the drinking water supplies.

Council's latest DWQMP Amendment was approved by the Regulator on the 7/08/2024. As such, two different DWQMPs were in effect during the reporting period. However, as the old 2022 DWQMP was only in effect for approximately one month, this report will focus upon the requirements of the most recent 2024 DWQMP.

This annual report includes the following:

- Activities undertaken over the financial year in operating Council's drinking water services;
- A summary of the Bedourie and Birdsville drinking water quality for the 2023-24 Financial Year;
- 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 DSC website or upon request at the Council office located in Bedourie.

## 1.1. Summary of Schemes Operated

DSC is a small Drinking Water Service Provider, as defined in the *Water Supply (Safety and Reliability) Act 2008.* Diamantina Shire covers an area of 95,000km² with an overall population of approximately 268 people which swells significantly during the cooler months due to travelling tourists. There are two operational water schemes within the Shire in the towns of Bedourie and Birdsville; the Shire's administration centre is located in Bedourie. Both schemes are characterised by deep artesian bores bringing hot water to the surface under pressure. For both schemes, the only treatment required is cooling. Bedourie's water is sourced from two bores, approximately 400m deep, with water that surfaces at approximately 45°C. Birdsville's bore water is sourced from one 1200m deep bore with water that surfaces at approximately 98°C.

Table 1: Summary of schemes.

Scheme	Water Source	Treatment	Pop. Served	No. Conns	Demand
Bedourie	Artesian Bore Water	Cooling	122	70	1.15 ML/d
Birdsville	Artesian Bore Water	Cooling	110	70	0.8 ML/d

# 2.0 ACTIONS TAKEN TO IMPLEMENT THE DWQMP

The implementation of DSC's DWQMP has provided Council with an operational framework to manage the water supply systems of Bedourie and Birdsville, ensuring greater surety for the supply of safe drinking water for the Shire. The risk management components of the DWQMP have been a priority for DSC in providing safe and reliable water sources for the local population and visitors.

Table 2 below provides a status summary of Diamantina Shire's Risk Management Improvement Program (RMIP), taken from the most recent 2024 DWQMP. The RMIP is an integral part of the DWQMP as it identifies the main risk factors and mitigation measures associated with Council's drinking water schemes. During the 2024-2025 Financial Year, Council completed three of their four RIMP items.

# 2.1. Risk Management Improvement Program

Table 2: Diamantina Shire Council Risk Management Improvement Program implementation status.

	Scheme	Hazard/Hazardous Event	Improvement Actions	Target Date	Comments	Status/Revised Target Date	Responsible Officer
<b>S1</b>	Birdsville	Heating of water in the exposed cooling pond.	The pipe between the cooling pond and ground-level reservoir is to be insulated.	Dec 24	This item has been addressed and the exposed pipe removed from the system.	Completed	Director of Infrastructure Services.
S2	Birdsville	Elevated Fluoride levels in the source water.	Annual notification to Birdsville residents informing them of the potential health impacts of elevated Fluoride levels in the drinking water.	Jun 22	Ongoing incident. Regular 6-monthly verification monitoring is undertaken to track Fluoride concentrations and ensure they remain only slightly above the ADWG. Fluoride fact-sheet updated in 2024.	Completed.	Director of Infrastructure Services.
\$3	Birdsville	Pathogenic ingress into the reservoirs.	E.coli and Total Coliform operational testing to be conducted from the new sampling point downstream of the two reservoirs. Data will be used to help indicate when reservoir cleaning may be required.	Dec 24	Ongoing.	Ongoing	Director of Infrastructure Services.
S4	and	Lack of Operation and Maintenance Procedures.	Review of all Operation and Maintenance Procedures to update any that are out of date and to identify new or missing procedures that need to be written and implemented.	Dec 2024	All procedures were reviewed and drafted in 2024.	Completed	Director of Infrastructure Services

# 3.0 WATER QUALITY MONITORING - COMPLIANCE WITH QUALITY CRITERIA

Council undertakes monthly, in-house operational testing in Bedourie and Birdsville, in addition to weekly visual inspections of all drinking water infrastructure (bores, reservoirs, cooling ponds etc.). Council also sends out water samples to an external laboratory twice a year as part of their verification monitoring program.

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 operational and verification monitoring for the Bedourie and Birdsville schemes undertaken during the reporting period, while Section 4.3 outlines any potential water quality issues encountered by Council.

# 3.1. Bedourie Drinking Water Quality Summary 2024- 2025 Financial Year

**Table 3: Bedourie Source Water Verification Monitoring Results.** 

		No. of			Sur	mmary of Res	ults		ADWG Value			
Parameters	Units	Samples Tested as per DWQMP	Samples Tested FY	Maximum Value	Mean Value	Minimum Values	Std Dev	95 <sup>th</sup> %	Health	Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	4	5	0	0	0	0	0	1	0		
Total Coliforms	CFU/100mL	4	5	0	0	0	0	0				
Conductivity	μS/cm	4	5	888	882	878	4.147288	887.6				
Dissolved Organic Carbon	mg/L	4	5	1	1	1	0	1				
рН	mg/L	4	5	8.4	8.18	8	0.132665	8.36			≥6.5 & ≤ 8.5	0
Total Dissolved Solids	mg/L	4	5	550	506	480	24.16609	542			600	0
Turbidity	NTU	4	5	0.7	0.58	0.5	0.09798	0.7			5	0
Aluminium	mg/L	4	5	0.005	0.0024	0.001	0.001497	0.0046			0.2	0
Chloride	mg/L	4	5	78	76	73	1.897367	78			250	0
Fluoride	mg/L	4	5	0.7	0.64	0.6	0.04899	0.7	1.5	0		
Selenium	mg/L	4	3	0.001	0.001	0.001	0	0.001	0.01	0		
Sodium	mg/L	4	5	210	196	190	8	208			180	5
Arsenic	mg/L	4	5	0.0005	0.0005	0.0005	0	0.0005	0.01	0		
Cadmium	mg/L	4	5	0.00005	0.00005	0.00005	0	0.00005	0.002	0		
Chromium	mg/L	4	5	0.0005	0.0005	0.0005	0	0.0005	0.05	0		
Copper	mg/L	4	5	0.008	0.0038	0.001	0.002786	0.0076			1	0
Lead	mg/L	4	5	0.003	0.00132	0.0002	0.001292	0.00296	0.01	0		

	No. of			Sun	nmary of Res	ults		ADWG Value				
Jnits	Samples Tested as per DWQMP	Samples Tested FY	Maximum Value	Mean Value	Minimum Values	Std Dev	95 <sup>th</sup> %	Health	Exceedances	Aesthetic	Exceedances	
mg/L	4	5	0.0001	0.0001	0.0001	0	0.0001	0.001	0			
mg/L	4	5	0.0005	0.0005	0.0005	0	0.0005	0.02	0			
mg/L	4	5	0.013	0.005	0.001	0.004336	0.0116	3	0			
mg/L	4	5	0.31	0.147	0.052	0.094835	0.282			0.3	1	
mg/L	4	5	0.19	0.1224	0.05	0.059658	0.186					
mg/L	4	5	0.015	0.01228	0.0094	0.002018	0.0148	0.5	0	0.1	0	
mg/L	4	5	0.014	0.01186	0.0093	0.001854	0.014					
mg/L	4	5	0.001	0.001	0.001	0	0.001	0.017	0			
Bq/L	4	5	0.123±0.043	0.052±0.031	0.019±0.025	0.037±0.006	0.108±0.04			0.5	0	
Bq/L	4	3	0.078±0.041	0.071±0.041	0.066±0.041	0.004±0.041	0.077±0.041			0.5	0	
	ng/L ng/L ng/L ng/L ng/L ng/L ng/L ng/L	Tested as per DWQMP  ag/L 4  ag/L 4	Tested as per DWQMP  ag/L 4 5  ag/L 4 5	Tested as per DWQMP  ag/L	Tested as per DWQMP  19g/L  4  5  0.0001  0.0001  19g/L  4  5  0.0005  0.0005  19g/L  4  5  0.013  0.005  19g/L  4  5  0.31  0.147  19g/L  4  5  0.019  0.1224  19g/L  4  5  0.015  0.01228  19g/L  4  5  0.014  0.01186  19g/L  4  5  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001  0.001	Tested as per DWQMP         Tested FY DWQMP         Maximum Value         Mean Value         Values           ng/L         4         5         0.0001         0.0001         0.0001           ng/L         4         5         0.0005         0.0005         0.0005           ng/L         4         5         0.013         0.005         0.001           ng/L         4         5         0.31         0.147         0.052           ng/L         4         5         0.019         0.1224         0.05           ng/L         4         5         0.015         0.01228         0.0094           ng/L         4         5         0.014         0.01186         0.0093           ng/L         4         5         0.001         0.001         0.001           q/L         4         5         0.123±0.043         0.052±0.031         0.019±0.025	Tested as per DWQMP  19g/L  4  5  0.0001  0.0001  0.0001  0.0001  0.0005  0.0005  0.0005  0.0005  0.0005  0.0005  0.0005  0.001  0.004336  0.001  0.001  0.001  0.004336  0.001  0.001  0.002  0.004835  0.001  0.001  0.001  0.001  0.004336  0.001  0.001  0.002  0.0038  0.001  0.0038  0.004	Tested as per DWQMP         Tested FY DWQMP         Walue         Value         Values         Std Dev Values         95th %           ng/L         4         5         0.0001         0.0001         0.0001         0         0.0001           ng/L         4         5         0.0005         0.0005         0.0005         0         0.0005           ng/L         4         5         0.013         0.005         0.001         0.004336         0.0116           ng/L         4         5         0.31         0.147         0.052         0.094835         0.282           ng/L         4         5         0.19         0.1224         0.05         0.059658         0.186           ng/L         4         5         0.015         0.01228         0.0094         0.002018         0.0148           ng/L         4         5         0.014         0.01186         0.0093         0.001854         0.014           ng/L         4         5         0.001         0.001         0.001         0         0.001           ng/L         4         5         0.014         0.01186         0.0093         0.001854         0.014           ng/L         4 <t< td=""><td>Tested as per DWQMP  Tested FY Value  Value  Value  Value  Value  Std Dev  95th % Health  Value  Std Dev  95th % Health  1001  1001  100</td><td>  Tested as per DWQMP</td><td>  Tested as per   DWQMP   Tested FY   Value   Value   Value   Value   Value   Value   Std Dev   95th %   Health   Exceedances   Aesthetic    </td></t<>	Tested as per DWQMP  Tested FY Value  Value  Value  Value  Value  Std Dev  95th % Health  Value  Std Dev  95th % Health  1001  1001  100	Tested as per DWQMP	Tested as per   DWQMP   Tested FY   Value   Value   Value   Value   Value   Value   Std Dev   95th %   Health   Exceedances   Aesthetic	

## **Health Guideline Exceedance**

**Table 4: Bedourie Distribution System Verification Monitoring Results.** 

		No. of Samples	Samples Tested			AD	ADWG Value				
Parameters	Units	Tested as per DWQMP	FY	Value	Health	Exceedances	Aesthetic	Exceedances			
E.coli	CFU/100mL	2	1	0	1	0					
Total Coliforms	CFU/100mL	2	1	0							
Conductivity	μS/cm	2	1	879							
Dissolved Organic Carbon	mg/L	2	1	1							
рН	mg/L	2	1	8			≥6.5 & ≤ 8.5	0			
Total Dissolved Solids	mg/L	2	1	470			600	0			
Turbidity	NTU	2	1	0.5			5	0			
Aluminium	mg/L	2	1	0.003			0.2	0			
Chloride	mg/L	2	1	74			250	0			
Fluoride	mg/L	2	1	0.7	1.5	0					
Sodium	mg/L	2	1	190			180	1			
Arsenic	mg/L	2	1	0.0005	0.01						
Cadmium	mg/L	2	1	0.00005	0.002	0					
Chromium	mg/L	2	1	0.0005	0.05	0					
Copper	mg/L	2	1	0.004			1	0			
Lead	mg/L	2	1	0.0006	0.01	0					
Mercury	mg/L	2	1	0.0001	0.001	0					

		No. of Samples	Samples Tested			AD	WG Value	
Parameters	Units	Tested as per DWQMP	FY	Value	Health	Exceedances	Aesthetic	Exceedances
Nickel	mg/L	2	1	0.0005	0.02	0		
Zinc	mg/L	2	1	0.006	3	0		
Total Iron	mg/L	2	1	0.14			0.3	0
Soluble Iron	mg/L	2	1	0.13				
Total Manganese	mg/L	2	1	0.013	0.5	0	0.1	
Soluble Manganese	mg/L	2	1	0.13				
Uranium	mg/L	2	1	0.001	0.017			
Gross Alpha	Bq/L	2	1	0.04			0.5	0
Gross Beta	Bq/L	2	1	0.048 ±0.043			0.5	0
			Aesthetic Guideli	ne Exceedance				
			Health Guidelin	e Exceedance				

**Table 5: Bedourie Distribution System In-House Operational Monitoring.** 

			No. of Samples	lo. of Samples No. of Summary of Results			ADWG Value						
Parameters	Units	Sampling Frequency	to be Tested as per DWQMP	Samples Tested in FY	Max Value	Mean Value	Min Value	STD	95 <sup>th</sup> Percentile		Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	Monthly	36	36	0	0	0	0	0	1	0		
Total Coliforms	CFU/100mL	Monthly	36	36	0	0	0	0	0				
Turbidity	NTU	Monthly	36	7	1.1	0.671429	0.3	0.276273	1.07			5	0

**Aesthetic Guideline Exceedance** 

**Health Guideline Exceedance** 

Table 6: Bedourie *E.coli* Annual Value Compliance Table.

Year					1/0	7/2024 - 30/	06/2025					
Month	July	August	September	October	November	December	January	February	March	April	May	June
Number of samples collected	3	6	3	3	4	3	3	3	3	3	5	3
Number of samples collected in which <i>E.coli</i> is detected	0	0	0	0	0	0	0	0	0	0	0	0
Number of samples collected in the previous 12-month period	37	40	40	40	41	41	41	41	41	41	42	42
Number of failures for the previous 12-month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

# 3.2. Birdsville Drinking Water Quality Summary 2024 - 2025 Financial Year

**Table 7: Birdsville Source Water Verification Monitoring Results.** 

		No. of			S	ummary of Re	esults			ADV	VG Value	
Parameters	Units	Samples Tested as per DWQMP	Samples Tested FY	Maximum Value	Mean Value	Minimum Values	Std Dev	95 <sup>th</sup> %	Health	Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	2	3	0	0	0	0	0	1	0		
Total Coliforms	CFU/100mL	2	3	31	10.33333	0	14.61354	27.9				
Conductivity	μS/cm	2	3	805	799.3333	790	6.649979	804.8				
Dissolved Organic Carbon	mg/L	2	3	1	1	1	0	1				
рН	mg/L	2	3	8.2	8.133333	8.1	0.04714	8.19			≥6.5 & ≤ 8.5	0
Total Dissolved Solids	mg/L	2	3	530	506.6667	480	20.54805	528			600	0
Turbidity	NTU	2	3	1	0.666667	0.5	0.235702	0.95			5	0
Aluminium	mg/L	2	3	0.033	0.020333	0.001	0.013888	0.0324			0.2	0
Chloride	mg/L	2	3	54	52	49	2.160247	53.9			250	0
Fluoride	mg/L	2	3	1.8	1.666667	1.6	0.094281	1.78	1.5	3		
Selenium	mg/L	2	1	0.001	0.001	0.001	0	0.001	0.01	0		
Sodium	mg/L	2	3	210	203.3333	200	4.714045	209			180	3
Arsenic	mg/L	2	3	0.0005	0.0005	0.0005	0	0.0005	0.01	0		
Cadmium	mg/L	2	3	0.00005	0.00005	0.00005	0	0.00005	0.002	0		
Chromium	mg/L	2	3	0.0005	0.0005	0.0005	0	0.0005	0.05	0		
Copper	mg/L	2	3	0.002	0.001333	0.001	0.000471	0.0019			1	0

		No. of			S	ummary of Re	esults			ADW	/G Value		
Parameters	Units	Samples Tested as per DWQMP	Samples Tested FY	Maximum Value	Mean Value	Minimum Values	Std Dev	95 <sup>th</sup> %	Health	Exceedances	Aesthetic	Exceedances	
Lead	mg/L	2	3	0.0002	0.0002	0.0002	0	0.0002	0.01	0			
Mercury	mg/L	2	3	0.0001	0.0001	0.0001	0	0.0001	0.001	0			
Nickel	mg/L	2	3	0.0005	0.0005	0.0005	0	0.0005	0.02	0			
Zinc	mg/L	2	3	0.005	0.003	0.001	0.001633	0.0048	3	0			
Total Iron	mg/L	2	3	0.029	0.020667	0.015	0.006018	0.0279			0.3	0	
Soluble Iron	mg/L	2	3	0.011	0.01	0.008	0.001414	0.011					
Total Manganese	mg/L	2	3	0.023	0.017333	0.013	0.00419	0.0223	0.5	0	0.1	0	
Soluble Manganese	mg/L	2	3	0.011	0.007767	0.003	0.003441	0.01083					
Uranium	mg/L	2	3	0.001	0.001	0.001	0	0.001	0.017	0			
Gross Alpha	Bq/L	2	3	0.133±0.044	0.059±0.03	0.02±0.022	0.0521±0.009	0.1222±0.0422			0.5	0	
Gross Beta	Bq/L	2	3	0.077±0.046	0.052±0.043	0.033±0.039	0.0184±0.003	0.074±0.046			0.5	0	
	Aesthetic Guideline Exceedance												
					Health Guide	eline Exceeda	nce						

**Table 8: Birdsville Distribution System Verification Monitoring Results.** 

		No. of Samples	Samples Tested		ADWG Value					
Parameters	Units	Tested as per DWQMP	FY	Value	Health	Exceedances	Aesthetic	Exceedances		
E.coli	CFU/100mL	2	1	0	1	0				
Total Coliforms	CFU/100mL	2	1	0						
Conductivity	μS/cm	2	1	805						
Dissolved Organic Carbon	mg/L	2	1	1						
Dissolved Oxygen	mg/L	2	1	10.5						
рН	mg/L	2	1	8			≥6.5 & ≤ 8.5	0		
Total Dissolved Solids	mg/L	2	1	510			600	0		
Turbidity	NTU	2	1	0.5			5	0		
Aluminium	mg/L	2	1	0.001			0.2	0		
Chloride	mg/L	2	1	54			250	0		
Fluoride	mg/L	2	1	1.6	1.5	1				
Selenium	mg/L	2	1	0.001	0.01	0				
Sodium	mg/L	2	1	200			180	1		
Arsenic	mg/L	2	1	0.0005	0.01	0				
Cadmium	mg/L	2	1	0.00005	0.002	0				
Chromium	mg/L	2	1	0.0005	0.05	0				
Copper	mg/L	2	1	0.001			1	0		
Lead	mg/L	2	1	0.0002	0.01	0				
Mercury	mg/L	2	1	0.0001	0.001	0				

		No. of Samples	Samples Tested		ADWG Value					
Parameters	urameters Units Tested as per FY DWQMP		Value	Health	Exceedances	Aesthetic	Exceedances			
Nickel	mg/L	2	1	0.0005	0.02	0				
Zinc	mg/L	2	1	0.001	3					
Total Iron	mg/L	2	1	0.01			0.3	0		
Soluble Iron	mg/L	2	1	0.004						
Total Manganese	mg/L	2	1	0.018	0.5	0	0.1	0		
Soluble Manganese	mg/L	2	1	0.018						
Uranium	mg/L	2	1	0.001	0.017	0				
Gross Alpha	Bq/L	2	1	0.079 ±0.035			0.5	0		
Gross Beta	Bq/L	2	1	0.048 ±0.042			0.5	0		
	Aesthetic Guideline Exceedance									
	Health Guideline Exceedance									

Table 9: Birdsville Distribution System in-House Operational Monitoring.

		<b>G</b> arantina	No. of Samples	No. of		Sun	nmary of	Results			ADW	'G Value	
Parameters	Units	Sampling Frequency	to be Tested as per DWQMP	Samples Tested in FY	Max Value	Mean Value	Min Value	STD	95 <sup>th</sup> Percentile	Health	Exceedances	Aesthetic	Exceedances
E.coli	CFU/100mL	Monthly	48	36	0	0	0	0	0	1	0		
Total Coliforms	CFU/100mL	Monthly	48	36	0	0	0	0	0				
Turbidity	NTU	Monthly	48	9	2.7	1.944444	0.4	0.649976	2.66			5	0

**Aesthetic Guideline Exceedance** 

**Health Guideline Exceedance** 

Table 10: Birdsville *E.coli* Annual Value Compliance Table.

Year	1/07/2024 - 30/06/2025											
Month	July	August	September	October	November	December	January	February	March	April	May	June
Number of samples collected	3	3	5	3	4	3	3	3	3	3	3	4
Number of samples collected in which <i>E.coli</i> is detected	0	0	0	0	0	0	0	0	0	0	0	0
Number of samples collected in the previous 12-month period	40	40	42	42	41	41	41	41	41	41	41	40
Number of failures for the previous 12-month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

#### 3.3. Bedourie and Birdsville ADWG Aesthetic and Health Exceedances

#### 3.3.1. Bedourie

The following ADWG aesthetic exceedances were reported in Bedourie's source water:

- Sodium (verification monitoring; 5 exceedances from 5 samples)
- Total Iron (verification monitoring; 1 exceedance from 5 samples)

The following ADWG aesthetic exceedances were reported in Bedourie's distribution system:

• Sodium (verification monitoring; 1 exceedance from 1 sample)

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

#### 3.3.2. Birdsville

The following ADWG aesthetic exceedances were reported in Birdsville's drinking water:

- Sodium (verification monitoring; 3 exceedances from 3 samples) Source Water
- Sodium (verification monitoring; 1 exceedance from 1 sample) Distribution System

The following ADWG health exceedances were reported in Birdsville's drinking water:

- Fluoride (verification monitoring; 3 exceedances from 3 samples) Source Water
- Fluoride (verification monitoring; 1 exceedance from 1 sample) Distribution System

# 3.4. Summary of Water Quality Within the Schemes

#### 3.4.1. Bedourie

Bedourie's drinking water is not chlorinated, as it generally complies with the ADWG. For the reporting period, the only ADWG exceedances reported within the scheme were for Sodium and Iron (aesthetic exceedances). Elevated concentrations of Sodium are common within groundwater supplies. The ADWG aesthetic value for Sodium has been set at 180mg/L, based on the taste threshold for Sodium in water. In terms of health risks associated with the consumption of elevated levels of Sodium, there is evidence linking excess Sodium intake with cardiovascular disease, however, Sodium intake via. the drinking water supply only makes a modest contribution when compared to an individual's total intake; therefore, no health guideline value has been set for Sodium concentrations in drinking water. It should also be noted that Bedourie's average Sodium concentration sits at 196 mg/L for the source water and 190 mg/L for the distribution system, which is only slightly above the ADWG aesthetic.

In regards to Iron, the ADWG aesthetic limit has been set at 0.3mg/L. Drinking water supplies with elevated Iron concentrations are not unsafe for consumption, but it may cause taste issues in addition to staining of laundry and plumbing fittings, fouling of ion exchange softeners and blockages in irrigation systems. As only one exceedance was recorded during the reporting period, elevated Iron is not considered a concern for the Bedourie scheme and manageable under Council's DWQMP. Moreover, the average concentration of Iron within Bedourie's drinking water supply for the reporting period was 0.147mg/L, well under the ADWG aesthetic limit.

#### 3.4.2. Birdsville

Similar to Bedourie, the Birdsville drinking water supply is not chlorinated, as the water generally complies with the ADWG. Birdsville also reported exceedances of the Sodium ADWG aesthetic in both the source water and distribution system. Like Bedourie, these exceedances are not considered a hazard for the scheme with the average source water concentration found to be 203 mg/L and the average distribution system concentration 200 mg/L.

Regarding ADWG health value exceedances, four Fluoride exceedances were reported within the Birdsville scheme. Elevated Fluoride levels are a natural characteristic of the Birdsville scheme and are associated with the area's underlying geology. As such, Fluoride exceedances are regularly identified within the scheme and reported as Drinking Water Incidents to the Regulator. This is discussed further in Section 4 below.

## 3.5. E.coli Verification and Operational Monitoring

Bacteriological sampling within the Bedourie and Birdsville drinking water schemes 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*.

## 3.6. Missed Verification and Operational Monitoring

During the reporting period, Council missed one round of distribution system verification monitoring for both the Bedourie and Birdsville schemes. This was attributed to a miscommunication between Council around sampling frequency which had changed with the implementation of the new DWQMP.

Additionally, in-house operational monitoring for Turbidity was not conducted as per the DWQMP, with only seven samples tested in the Bedourie scheme and nine in the Birdsville scheme. As detailed in Section 6.1.1 of Council's DWQMP, Turbidity was supposed to be tested for at the following frequencies:

- Bedourie 3x samples per month (36 per year)
- Birdsville 4x samples per month (48 per year)

Council are in the process of purchasing new Turbidity meters which will assist with meeting their Turbidity monitoring requirements.

#### 3.7. Birdsville New Bore

In early 2025, Council drilled a new Deep Artesian Bore in Birdsville to increase water security for the town. As part of this new Bore, Council also constructed a new cooling pond and heat exchange system for the scheme. Council have commenced water quality testing for the new bore and anticipate that it will be fully commissioned in early 2026 via. consultation with the Regulator and QLD Health. Details of the water quality data obtained for the new bore is provided in Table 11 below.

The intention is that once the new bore is commissioned, the Old Birdsville Bore will be transitioned to a back-up water supply. Further details on this will be provided in the next 2025-26 Annual Report.

**Table 11: Birdsville New Bore Verification Monitoring.** 

	No. of Samples	Samples Tested		ADWG Value					
Parameters	Units	Tested as per DWQMP	FY	Value	Health	Exceedances	Aesthetic	Exceedances	
<i>E.coli</i>	CFU/100mL	2	1	0	1	0			
Total Coliforms	CFU/100mL	2	1	0					
Conductivity	μS/cm	2	1	818					
Dissolved Organic Carbon	mg/L	2	1	1					
рН	mg/L	2	1	7.5			≥6.5 & ≤ 8.5	0	
Total Dissolved Solids	mg/L	2	1	540			600	0	
Turbidity	NTU	2	1	0.7			5	0	
Aluminium	mg/L	2	1	0.021			0.2	0	
Chloride	mg/L	2	1	52			250	0	
Fluoride	mg/L	2	1	1.6	1.5	1			
Selenium	mg/L	2	1	0.001	0.01	0			
Sodium	mg/L	2	1	200			180	1	
Arsenic	mg/L	2	1	0.0005	0.01	0			
Cadmium	mg/L	2	1	0.00005	0.002	0			
Chromium	mg/L	2	1	0.0005	0.05	0			
Copper	mg/L	2	1	0.015			1	0	
Lead	mg/L	2	1	0.0049	0.01	0			
Mercury	mg/L	2	1	0.0001	0.001	0			
Nickel	mg/L	2	1	0.0005	0.02	0			

		No. of Samples	Samples Tested		ADWG Value					
Parameters	Units	Tested as per DWQMP	FY Value		Health	Exceedances	Aesthetic	Exceedances		
Zinc	mg/L	2	1	0.004	3					
Total Iron	mg/L	2	1	3			0.3	1		
Soluble Iron	mg/L	2	1	3.2						
Total Manganese	mg/L	2	1	0.059	0.5	0	0.1	0		
Soluble Manganese	mg/L	2	1	0.054						
Uranium	mg/L	2	1	0.001	0.017	0				
Gross Alpha	Bq/L	2	1	0.043			0.5	0		
Gross Beta	Bq/L	2	1	0.043			0.5	0		
Aesthetic Guideline Exceedance										
	Health Guideline Exceedance									

## 4.0 INCIDENTS REPORTED TO THE REGULATOR

DSC had one ongoing Drinking Water Incident during the reporting period, as detailed in Table 12 below.

Table 12: Water Quality Incidents Reported to the Regulator for the 2024-2025 Financial Year.

Incident Date	Scheme	Issue	Preventative Actions	Investigation Report
Initially reported in February 2016, updates provided 8/10/2024 & 29/11/2024	Birdsville (DWI-7-42- 00003)	Elevated Fluoride levels in exceedance of the ADWG health value within Birdsville's source and distribution water.	Public notification and ongoing monitoring to ensure values are stable and remain only slightly above the ADWG health limit.	N/A, ongoing incident.

DSC has an ongoing Drinking Water Incident for the elevated Fluoride levels within Birdsville's drinking water. Elevated Fluoride is associated with Birdsville's natural geology and averages around 1.7 mg/L, slightly above ADWG health value of 1.5 mg/L. Treatment to reduce Fluoride levels is not financially feasible for Council considering the town's small population and that the concentration is only slightly above the ADWG health value. The main issues associated with elevated Fluoride is dental fluorosis primarily affecting children under the age of 6. Despite the frequent exceedance of Fluoride levels, 6-monthly verification monitoring has been deemed suitable for the scheme as historical data has identified Fluoride concentrations to remain within a consistent range. At this stage, Council's primary management strategy is to provide public notification to Birdsville residents in the form of a Fluoride factsheet to help the community understand the potential impacts of elevated Fluoride in the drinking water supply and to continue monitoring Fluoride concentrations to ensure they remain only slightly above the ADWG health value.

# 5.0 CUSTOMER COMPLAINTS REGARDING WATER QUALITY

There were no customer complaints made to Council regarding drinking water quality during the 2024-2025 Financial Year.

# 6.0 DWQMP REVIEW OUTCOMES

The last DWQMP Review was conducted during September 2025 and submitted to the Regulator on 15/10/2025. The Review identified the following updates that needed to be incorporated into Council's DWQMP:

- Details of the new CEO, Director of Infrastructure Services and Birdsville Town Services Supervisor.
- Details of the new Birdsville cooling pond system and bore.
- Details of the updated risk assessment undertaken for *N. fowleri* and PFAS.
- Details of Council's updated Risk Management Improvement Programme.
- Details of the updated operational and verification monitoring programmes which include the new Birdsville Bore.
- Details of the new ADWG health values for Selenium, Lead and Manganese.

In summary, the Review found the current DWQMP to be out of date and requiring an amendment. Council are currently in the process of amending their DWQMP which is due to be submitted to the Regulator on the 26/11/2025.

#### 7.0 DWQMP AUDIT FINDINGS

The Bedourie and Birdsville drinking water schemes were last audited in March 2022. The audit identified non-conformances and improvement items, which were incorporated into the 2023-24 DWQMP Amendment. The next DWQMP audit has been scheduled for March 2026.

## 8.0 DSC CUSTOMER SERVICE STANDARDS REVIEW

Council's Customer Service Standards were reviewed November 2025. The next review is scheduled for 2030.