

# ANNUAL REPORT DRINKING WATER QUALITY

Registered Water Service Provider No. 534

2023 – 2024

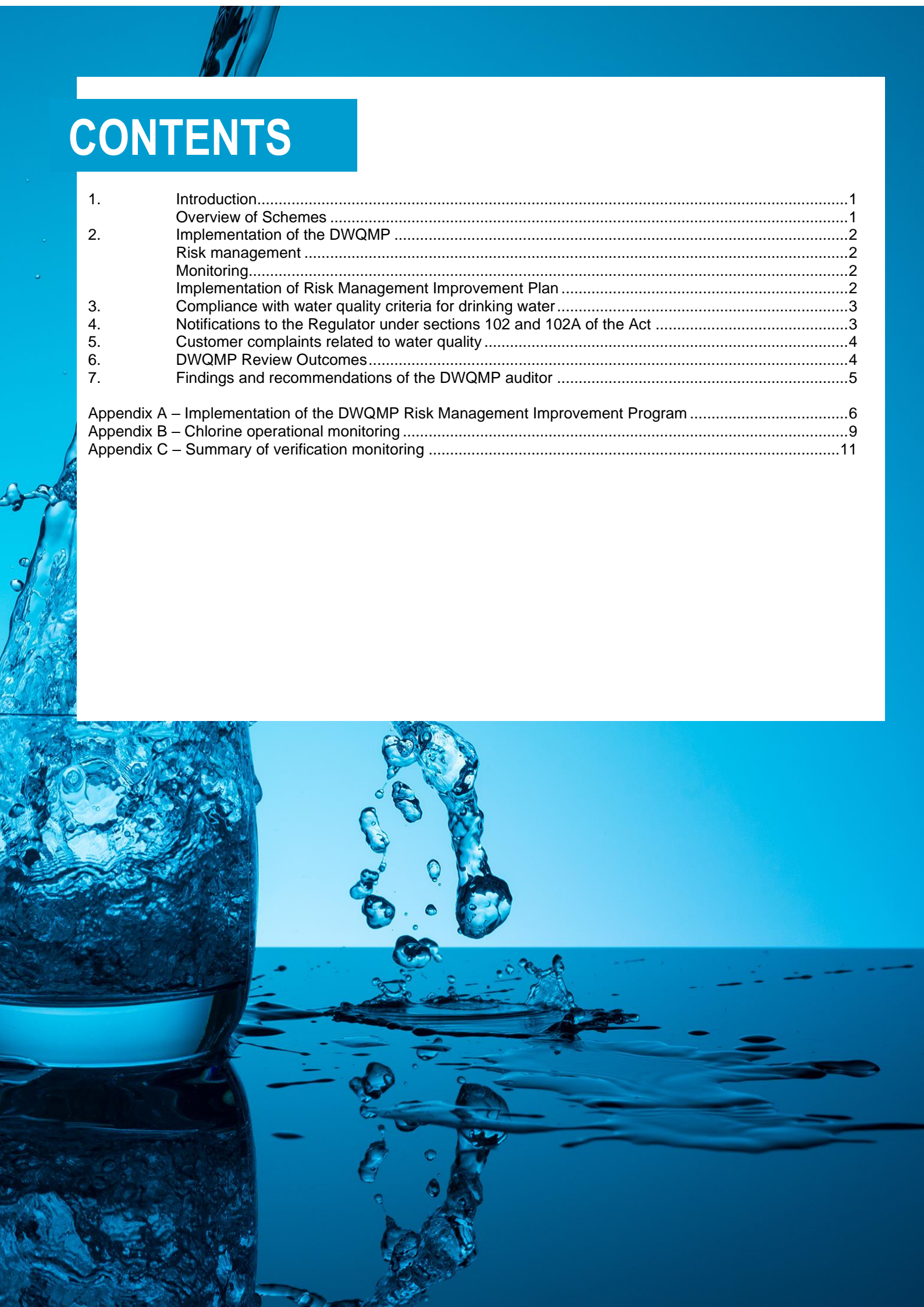


**WEIPA**  
TOWN AUTHORITY



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# Document History

Version	Date	Author/s	Reviewed by	Approved by	Comments
0.1	25/10/2024	Emma Sun, Viridis	Bliss Pappachan, Viridis	Tasleem Hasan, Viridis	Draft
1.0	18/11/2024	Emma Sun, Viridis	Renee Williams, Weipa Town Authority	Renee Williams, Weipa Town Authority	Final

## Glossary of terms

ADWG	Australian Drinking Water Guidelines (2011). Published by the National Health and Medical Research Council of Australia
The Act	<i>Water Supply (Safety and Reliability) Act 2008</i>
CCP	Critical Control Point
CFU/100 mL	Colony forming units per 100 millilitres
DLGWV (Regulator)	Department of Local Government, Water and Volunteers
DWQMP	Drinking Water Quality Management Plan
<i>E. coli</i>	<i>Escherichia coli</i> , a bacterium which is considered to indicate the presence of faecal contamination and therefore potential health risk
Event	Means anything that has happened to the service that has escalated beyond the ability to control and there is concern that public health may be adversely impacted as a result.
HPC	Heterotrophic plate counts, measure of microorganisms that require organic carbon for growth. There is no guideline value for HPC but it is used as an indicator of system cleanliness.
Incident	Means a non-compliance with water quality criteria (e.g. exceeding an ADWG health guideline value).
LOD	Limit of Detection
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
pH	An expression of the intensity of the basic or acid condition of a liquid. Natural waters usually have a pH between 6.5 and 8.5. Aesthetic issue (not of health concern).
ppm	Parts per million (1 ppm = 1 mg/L)
QLD	Queensland
RTA	RTA Weipa Pty Ltd (Rio Tinto)
SCADA	Supervisory Control Data Acquisition
SPID	Service Provider Identification
SOP	Standard Operating Procedure
Total chlorine	Chlorine is used for disinfection to kill harmful bacteria and viruses in raw water. Total chlorine should not be >5 mg/L as per the ADWG.
TPHU	Townsville Public Health Unit
Turbidity	The cloudiness of water caused by the presence of fine suspended matter. It can impact the treatment process, indicate break-through of protozoa if not controlled and harbour pathogens from disinfection.
UL	Upper Limit
WTA	Weipa Town Authority
<	Less than
>	Greater than

## Executive Summary

The Weipa Town Authority (WTA) is a registered service provider (SPID number 534) operating under an approved Drinking Water Quality Management Plan (DWQMP) as required by the *Water Supply (Safety and Reliability) Act 2008* (the Act). Implementation of the DWQMP ensures a consistent and safe supply of quality drinking water to protect public health. This is achieved through proactive identification and minimisation of public health related risks associated with drinking water.

One of the requirements of the Act is the preparation of a Drinking Water Quality Annual Report that is submitted to the Regulator (Department of Local Government, Water and Volunteers, [DLGWV]) annually. This report must then be made publicly available for customers and stakeholders to demonstrate that the DWQMP has been satisfactorily implemented for the financial year.

WTA manages three water supply schemes: Rocky Point Supply, Evans Landing Supply and Weipa Airport Supply.

During the reporting period, WTA supplied drinking water that complied with the water quality criteria set out in the Public Health Regulation 2018.

WTA achieved an excellent level of customer satisfaction as there were no water quality customer complaints recorded during the reporting period.

There were two separate high turbidity events and one elevated chlorate incident that were reported to the water Regulator within the required timeframe and managed in a coordinated and timely manner. These events had no impact to public health.

A regular review of the DWQMP was conducted on 4 April 2024. The review required an update to the DWQMP and approval of the amended DWQMP by the Regulator.

No regulatory audit was required to be conducted during the reporting period. The next regular audit for the DWQMP must be conducted by 4 October 2025.

WTA and the Tailings and Water Department continue to actively implement the DWQMP effectively to ensure the provision of safe drinking water quality to our customers.

# 1. Introduction

This report documents the performance of Weipa Town Authority's (WTA's) (RTA Weipa Pty Ltd in its capacity as the WTA) drinking water service in implementing the Drinking Water Quality Management Plan (DWQMP) for the 2023-24 financial year. This reporting is required under the *Water Supply (Safety and Reliability) Act 2008* (the Act).

WTA is a registered service provider (SPID number 534) operating under an approved DWQMP to ensure a consistent and safe supply of quality drinking water to protect public health. This is achieved through proactive identification and minimisation of public health related risks associated with drinking water.

This report aims to:

- be a reference document for the Regulator (Department of Local Government, Water and Volunteers, [DLGWV]), as well as customers, on WTA's performance in relation to the DWQMP reporting obligations under the Act, for the reporting period.
- provide a summary of WTA's performance in implementing the DWQMP.

The report is submitted to the Regulator to fulfil WTA's regulatory requirements and is made available to WTA's customers via the website or for inspection upon request at WTA's office.

## Overview of Schemes

WTA manages three water supply schemes:

- Rocky Point Water Supply Scheme
- Evans Landing Water Supply Scheme
- Airport Water Supply Scheme.

The Weipa drinking water supply is the joint responsibility of WTA and the Tailings and Water Department, RTA Weipa Pty Ltd. WTA is the local authority for the town of Weipa and through the rates system, charges residents and businesses for water connections and use in the three water supply schemes.

WTA has an internal agreement with the Tailings and Water Department to provide potable water to bulk water meters for distribution by WTA in each of the three water supply schemes. WTA is the contact for customers regarding any water issues or concerns.

Table 1 outlines a summary of the water supply schemes.

**Table 1 List of Drinking Water Supplies**

Scheme Name	Water source	Treatment	Suburbs Served	Pop. Served (approx.)	Connections (approx.)	Average Demand ML/day
Rocky Point	Bores	pH correction, disinfection	Rocky Point	2,214	1,145	15.1
			Trunding	929		
			Nanum	904		
Evans Landing	Bores	pH correction, disinfection	Evans Landing	56	66	2.00
Airport	Bore	pH correction, disinfection	Airport precinct	600 <sup>1</sup>	7	1.03
<b>TOTAL</b>				<b>4,703</b>	<b>1,218</b>	<b>18.13</b>

<sup>1</sup> Permanent population served is less than 30. 600 is the itinerant population passing through the airport terminal.

## 2. Implementation of the DWQMP

The implementation of the DWQMP is discussed in this section and captured in the other sections that follow.

### Risk management

The process of keeping drinking water safe is one method of risk management. Through efficient operations and implementation of the DWQMP, WTA and the Tailings and Water Department have ensured effective risk management to assure safe quality of drinking water to our customers.

During the reporting period, WTA supplied drinking water that complied with the water quality criteria set in the Public Health Regulation 2018 and the Australian Drinking Water Guidelines (ADWG). Any operational issues and/or events were managed appropriately to ensure that there was no adverse impact on public health.

### Monitoring

WTA undertake water quality testing on the three schemes in accordance with the DWQMP to ensure compliance with the ADWG.

Operational monitoring for chlorine, pH, turbidity and temperature within the three schemes is conducted on each business day. Supervisory Control Data Acquisition (SCADA) software is employed by the Tailings and Water Department to provide continuous monitoring information of the key water quality parameters. While SCADA is monitored by operators onsite and timely actions undertaken to prevent compromised quality of water being supplied, it is also monitored offsite 24/7 to provide an additional control measure, especially during out of hours' time. An onsite "on call" phone is also monitored 24/7 to allow for a timely response to any identified issues. The chlorine operational monitoring for the three schemes have been graphically analysed in Appendix B.

Verification monitoring occurs once per week with samples sent to Cairns Regional Council Laboratory Services, which is NATA accredited, for analysis of turbidity, *E. coli*, Heterotrophic Plate Count (HPC) and total coliforms. WTA also conducts a full chemical analysis periodically for the water supply schemes. Fully trained WTA staff undertake all monitoring and sampling.

### Implementation of Risk Management Improvement Plan

WTA and the Tailings and Water Department have undertaken and/or planned various improvement actions to ensure safety of drinking water to our customers. The improvement actions have been identified through detailed risk assessment to ensure safe quality of drinking water.

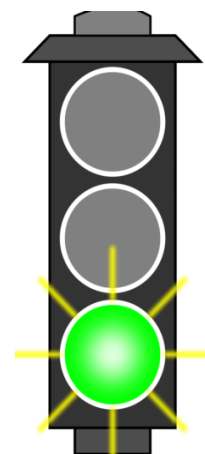
Appendix A includes the status and relevant commentary on the improvement actions. WTA and the Tailings and Water Department continue to actively implement the Improvement Plan.

### 3. Compliance with water quality criteria for drinking water

Verification of drinking water quality provides an assessment of the overall performance of the system and the ultimate quality of the drinking water being supplied to customers. It confirms compliance with water quality criteria set by the DLGWV, Queensland (QLD) Health and any other formal requirements. WTA undertakes regular sampling and testing to assess whether water quality is complying with the DWQMP water quality criteria.

Verification monitoring was undertaken in accordance with the DWQMP. The verification monitoring data for the three schemes and level of compliance are summarised in Appendix C.

There was full compliance against the ADWG water quality criteria for the reporting period. There was one elevated chlorate result in the Airport Water Supply Scheme, which was above QLD Health’s interim guideline value, but WTA appropriately and effectively managed the incident to ensure there was no impact to public health.



### 4. Notifications to the Regulator under sections 102 and 102A of the Act

Table 2 includes the notifications made to the Regulator (DLGWV). Events<sup>2</sup> and/or Incidents<sup>3</sup>, as relevant, were management effectively and in a timely manner to ensure protection of public health.

**Table 2 Notifications made to DLGWV for the 23-24 period**

Date	Scheme	Type	Issue	Actions taken	Comments
13/07/23	Airport	Event	Reported high turbidity in the airport reticulation system following repairs completed on section of line between Bore SA09 and the supply tank.	Operational monitoring results were reviewed including Critical Control Points (CCPs). A “Do Not Consume” Notice was issued on the 13/07/23. The taps at airport were tagged and bottled water was made available to users. Leak identified and fixed. System was flushed. Daily testing was undertaken.	Immediate actions and consistent monitoring until compliance with the water quality criteria, ensured that there was no subsequent impact on public health. The Townsville Public Health Unit (TPHU) and DLGWV advised that it was okay to lift the alert on 04/08/23.
30/07/23	Evans Landing	Event	Reported high turbidity in the Evans landing reticulation System following grab sample on raw water line between Bore SA110 and supply tank.	Operational monitoring results were reviewed including CCPs. A “Do Not Consume” Notice was issued on the 30/07/23. Bottled water was made available to users. Leak identified and fixed. System was flushed. Daily testing undertaken.	Immediate actions and consistent monitoring until compliance with the water quality criteria, ensured that there was no subsequent impact on public health. The TPHU and DLGWV advised that it was okay to lift the alert on 05/08/23.
18/10/23	Airport	Incident	Elevated chlorate result of 1.04 mg/L in the airport reticulation system.	The chlorine stock was investigated with regards to age, rotation and storage conditions. The operators refreshed the chlorine dosing tank with fresh chlorine stock and put inside an air-conditioned container. The network was flushed. Follow up samples were collected.	Regulator was notified, immediate actions were taken and follow up samples collected to confirm compliance with the water quality criteria, ensured that there was no subsequent impact on public health.

<sup>2</sup> Potential to impact water quality

<sup>3</sup> Non-compliance against ADWG value



## 5. Customer complaints related to water quality

Reporting of water quality complaints is required as part of this Annual Report. There were no formal water quality related customer complaints for the 2023-24 period.

## 6. DWQMP Review Outcomes

The DWQMP was required to be reviewed by 4 April 2024 as part of the DWQMP approval conditions. An external contractor was engaged to facilitate the review process. A review workshop was undertaken on 5-6 March 2024 and the review was completed on 4 April 2023 (by the required period).

The findings of the review are shown in Table 3.

**Table 3 DWQMP review details and findings**

Area Reviewed	Details	Findings
Service Details	Current population served, connections and demand statistics (Table 1-1 List of Drinking Water Supplies) needs to be updated for currency, census data can be used. Future projection not needed as per the new guideline so can be removed.	Section 1.3 of the DWQMP to be updated.
Infrastructure and Process Flow Diagram	The process flow and operations for the supplies were verified and changes noted. This was undertaken at the workshop on Day 1 - 05/03/2024.  No material changes to the overall schematics. Bore SA110 at Evans landing is no longer in use and therefore, there are only minor changes to the Evans landing schematic and relevant details in the DWQMP.	Schematics and details of the supply for Evans Landing to be updated in the DWQMP.
Catchment Details and Classification	New guideline requirement. Needs to be further explained and catchment / source water protection information included.  Section 2 Catchment Characteristics needs updating for currency.	Included in the Water Quality Data Analysis Report 2024 – this is a DWQMP supporting document. This report was used for workshop discussions.  Section 2 of the DWQMP to be updated.
Water Quality Data	Detailed analysis of available key water quality data for the water supplies was undertaken. A water quality data analysis report was prepared to guide discussions at the risk assessment workshop and verify the risk profiles.	Water Quality Data Analysis Report 2024 prepared – a DWQMP supporting document.
Risk Assessment	The risk assessment for the supplies was reviewed in detail as a workshop on 05-06/03/2024. An appropriate risk team was assembled for the review (risk team details included in the Risk Register – relevant tab).	Update and finalise the Risk Assessment Register – a DWQMP supporting document for the supplies based on the workshop discussions.
Improvement Plan	Previous improvement actions were reviewed as part of the risk workshop. New improvement actions were identified as relevant.	Update the Improvement Plan – a DWQMP supporting document, following the workshop, including addition of new improvement actions identified from the review.
Procedures and Information Management	Reviewed Section 6.3 Operation and Maintenance Procedures, Section 8 Information Management and Appendix A – DWQMP Related Procedures. Need to update for currency.	Section 6.3, Section 8 and Appendix A of the DWQMP to be updated.
Incident and Emergency Response	Section 6.4 Management of Incidents – Table 6-2 to be updated for currency – emergency contacts.	Section 6.3 of the DWQMP, Table 6-2, to be updated.

Area Reviewed	Details	Findings
Monitoring Programs	<p>The monitoring plan was reviewed. There were minor changes to frequency of PFAS testing, aligning the critical limit for disinfection CCP across all supplies and adding turbidity as a parameter, and adding <i>E. coli</i> as a parameter for the raw water extraction CCP.</p> <p>An additional sampling point location has been discussed for the Rocky Point supply to provide enhanced coverage of the network. This is being investigated.</p>	<p>Update the DWQMP Monitoring Programs spreadsheet.</p> <p>Update Section 4 of the DWQMP in relation to the additional sampling location for Rocky Point.</p>
General – DWQMP Body	<p>The DWQMP document was reviewed.</p> <p>Minor updates to section 1.4 Key Stakeholders are needed for currency.</p> <p>Minor updates to general body are needed for currency.</p>	<p>Update the DWQMP based on the review findings.</p>

The outcome of the review was the need to update the DWQMP. The DWQMP was subsequently amended and submitted to the Regulator.

## 7. Findings and recommendations of the DWQMP auditor

No regulatory audit was required to be conducted during the reporting period.

The next regular audit is due by 4 October 2025.

## Appendix A – Implementation of the DWQMP Risk Management Improvement Program

Table A1 – Progress against the Risk Management Improvement Program in the approved DWQMP (current as of the time of preparation of this report)

Action #	Supply/Scheme	Improvement Actions	Status	Comments
WQ2	All supplies	Establish designated fill points in the network and ensure that these have appropriate backflow prevention.	In Progress	Found location, job in system to do it, in LP - one.
WQ4	All supplies	Ensure all water operators have some formal water operations certificate and/or training.	In Progress	Round 1 of Cert III has been done. Round 2 being organised. 5 passed in April 23, 17 total.
WQ5	All supplies	Review the internal training matrix to include water operations specific qualification/training for relevant roles.	Closed	This is duplication of WQ33 hence closed out here.
WQ6	All supplies	Develop a procedure on chemical quality assurance.	In Progress	Reputable suppliers are used so risk is low but procedure needs to be done. This has been started but still needs to be finalised.
WQ9	Airport	Complete the groundwater movement model, which is currently under development.	In Progress	Last modelling done in 2013, new modelling being done in 2024. Ongoing, no update.
WQ13	Rocky Point	Review PM01 task to verify that bore condition visual inspection is part of the weekly visits. Add this in if missing.	Completed	PM01's are currently being updated.
WQ17	Rocky Point	Review strategy for use of bores SA36, SA37, SA351.	Completed	A strategy was discussed. Monitoring Plan to be followed.
WQ20	All supplies	Set up a register or log to record actions undertaken when a CCP alarm is received.	Completed	A register has been developed.
WQ22	Evans Landing	Cap off bore SA110.	To Start	Resourcing issue at the moment, disconnected from network.
WQ25	Rocky Point	Undertake a drone inspection of the Town Tower tank for vermin proof and condition of roof - potential ingress point.	Completed	Drone inspection done in July 2024. No signs of obvious ingress points.

<b>WQ26</b>	Rocky Point	RP Town Tower - undertake a condition assessment (via contractor engagement).	<b>To Start</b>	NDT testing complete, waiting for review.
<b>WQ27</b>	Evans Landing	Verify that EL tanks overflow pipes have a mesh barrier (vermin entry potential)	<b>Completed</b>	Checked on 13/8/24. No issues noted, it's properly sealed.
<b>WQ28</b>	Rocky Point	RP Town Tower - set up scour point, if possible.	<b>Completed</b>	A way to scour has been identified.
<b>WQ29</b>	All supplies	Finalise the 6-monthly reservoir inspection checklist for the small airport tank.	<b>Completed</b>	Done and being used
<b>WQ30</b>	All supplies	Audit the 6-monthly reservoir inspection process to verify that implementation is being undertaken as required.	<b>In Progress</b>	RTA - PM01 added - completed. WTA - check if Regg is aware, Greg has left.
<b>WQ32</b>	All supplies	Investigate strategies to minimise formation of chlorates.	<b>Completed</b>	Commissioning of aircon containers to be done, already onsite.
<b>WQ33</b>	All supplies	Review and update the internal training matrix (e.g. skills/qualification per position and shortfalls identified, including the DWQMP).	<b>In Progress</b>	Matt to check with RW, if Cert II may be suitable. TW - send course outline to Matt.
<b>WQ34</b>	All supplies	Develop a training matrix, which includes the DWQMP components.	<b>To Start</b>	
<b>WQ35</b>	All supplies	Develop a formal induction process for new operators/staff, with tick off on competency over time (which includes the DWQMP components e.g. CCP breach response, incident response etc).	<b>In Progress</b>	Part of the Workday app.
<b>WQ36</b>	All supplies	Notify requirement widely to all relevant staff / contractors, including procurement that materials procured should be suitable to be in contact with potable (e.g. be AS4020 compliant or have a WaterMark).	<b>Completed</b>	T&W - okay, inhouse staff/contractor (Goodline) made aware, also included in SOP. WTA - in their mains repair procedure
<b>WQ37</b>	All supplies	Review in-house calibration record keeping.	<b>Completed</b>	Done and being used
<b>WQ38</b>	All supplies	Verify that Rio's cyber security auditing captures water and sewer assets (e.g., SCADA).	<b>Completed</b>	IT confirmed that it is protected.
<b>WQ40</b>	Rocky Point	Investigate an additional sampling location in the Rocky Point township to provide coverage on the eastern side.	<b>Completed</b>	Showgrounds.

<b>WQ41</b>	All supplies	Review and update overdue SOPs.	In Progress	RTA - in progress WTA - check with RW
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## Appendix B – Chlorine operational monitoring

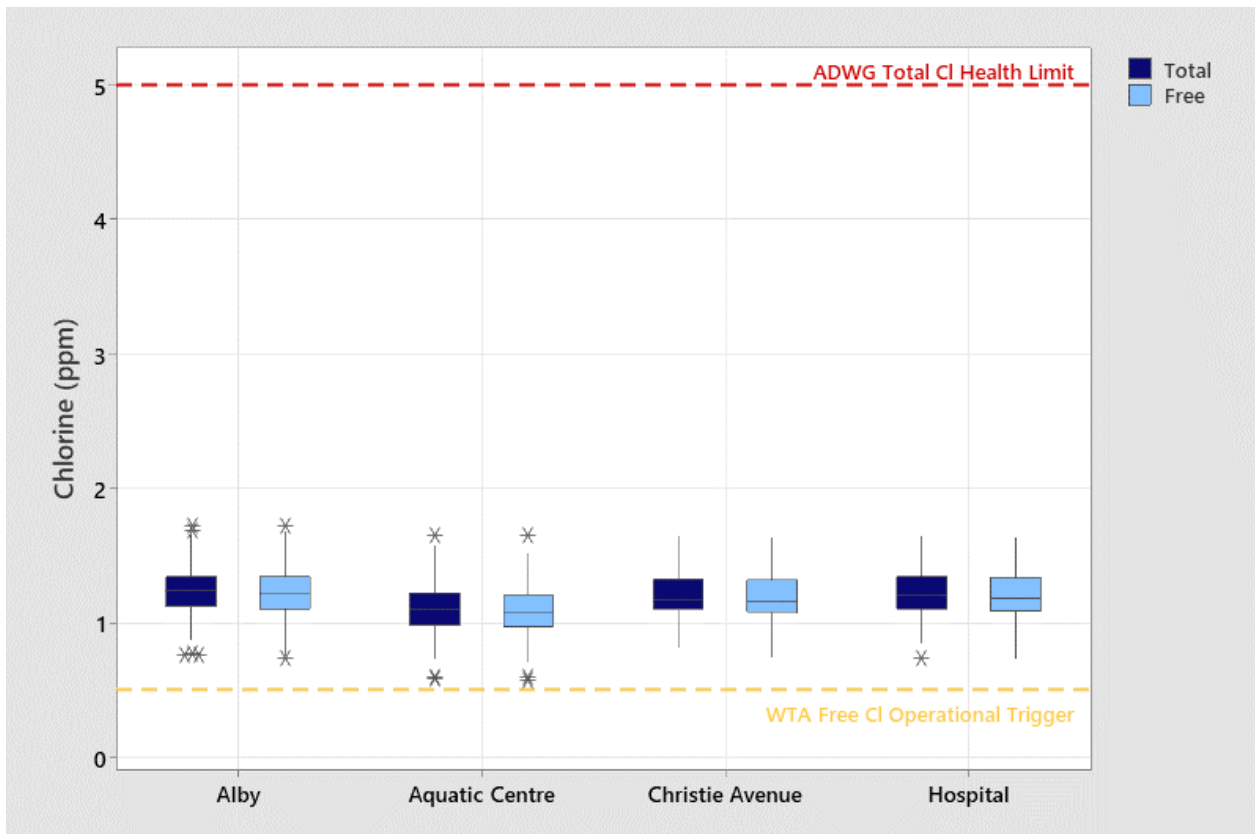


Figure B1(a) Free and total chlorine operational monitoring – Rocky Point Water Supply Scheme

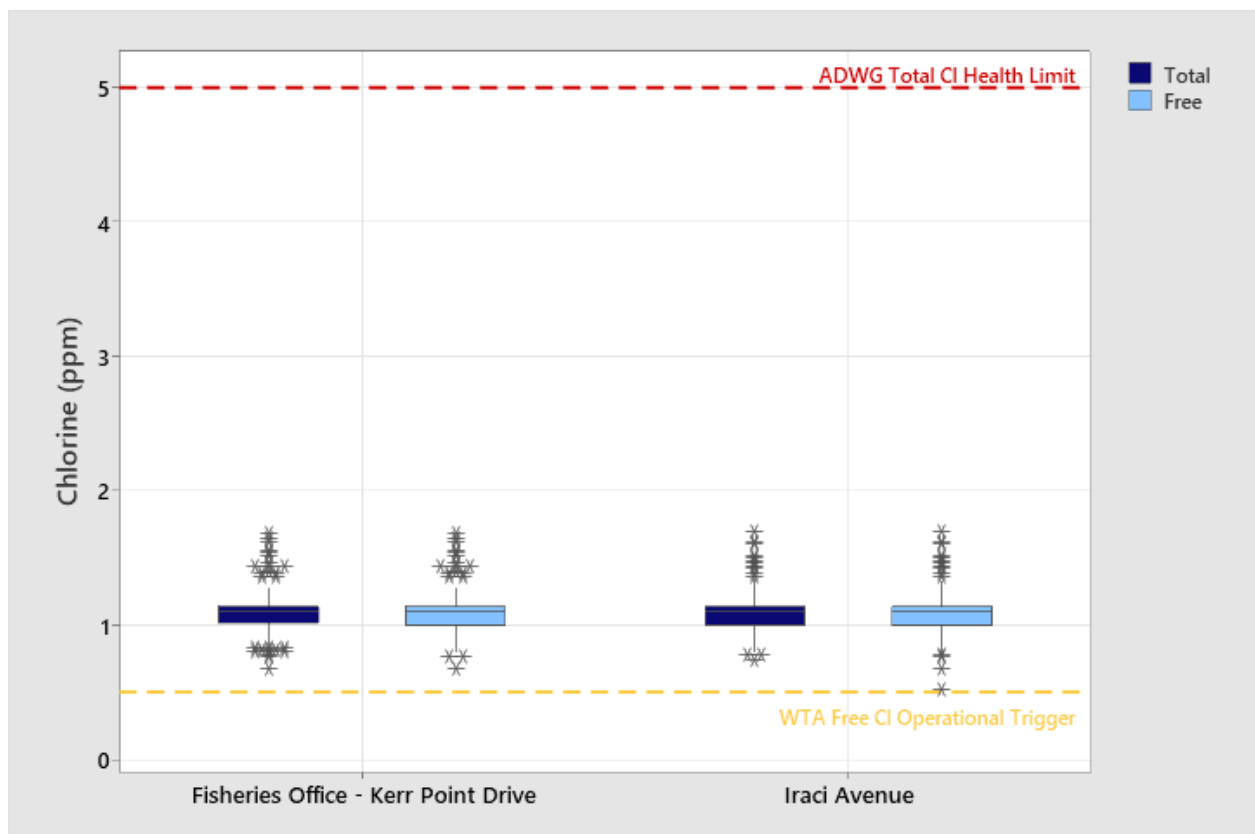


Figure B1(b) Free and total chlorine operational monitoring – Evans Landing Water Supply Scheme



Figure B1(c) Free and total chlorine operational monitoring – Airport Water Supply Scheme

## Appendix C – Summary of verification monitoring

### Data Background and Treatment

Details of the data used in the report and treatments applied to the data are as follows:

- data sources: verification monitoring data bulk extract from the testing laboratory for the reporting period
- data analysis: undertaken using Excel
- identified errors: removed from statistical analysis, and noted at the respective place
- <LOD and >UL: < LOD (limit of detection) was treated as LOD/2 and >UL (upper limit specified for test) was taken as UL
- outliers: considered in the statistical analysis, unless classed as specific error.

The results of the monitoring program and level of compliance is included in the tables below.

**Table C1 – Summary of microbiological verification monitoring – all schemes**

Scheme	Sampling Point	Stats	<i>E. coli</i> (CFU/100 mL)	Heterotrophic Plate Count (CFU/mL)	Total Coliforms (CFU/100 mL)	Comments
Airport	Airport	Count	54	53	54	<b>Full compliance</b> with the water quality criteria. <i>E. coli</i> annual rolling value was 100%, the Public Health Regulation 2018 requires at least 98%. No, to very low HPC and total coliforms indicate a relatively clean system.
		Min	<1	5	<1	
		Mean	<1	7	<1	
		Max	<1	110	<1	
Evans Landing	Fisheries Office – Kerr Point Drive	Count	52	51	52	<b>Full compliance</b> with the water quality criteria. <i>E. coli</i> annual rolling value was 100%, the Public Health Regulation 2018 requires at least 98%. No, to very low HPC and total coliforms indicate a relatively clean system.
		Min	<1	5	<1	
		Mean	<1	6	<1	
		Max	<1	20	<1	
	Iraci Avenue	Count	52	51	52	
		Min	<1	5	<1	
		Mean	<1	10	<1	
		Max	<1	160	<1	



Scheme	Sampling Point	Stats	<i>E. coli</i> (CFU/100 mL)	Heterotrophic Plate Count (CFU/mL)	Total Coliforms (CFU/100 mL)	Comments
Rocky Point	Alby	Count	55	54	55	<p><b>Full compliance</b> with the water quality criteria. <i>E. coli</i> annual rolling value was 100%, the Public Health Regulation 2018 requires at least 98%. No, to very low HPC and total coliforms indicate a relatively clean system.</p>
		Min	<1	5	<1	
		Mean	<1	6	<1	
		Max	<1	20	<1	
	Aquatic Centre	Count	55	54	55	
		Min	<1	5	<1	
		Mean	<1	5	<1	
		Max	<1	20	<1	
	Christie Avenue	Count	54	53	54	
		Min	<1	5	<1	
		Mean	<1	8	<1	
		Max	<1	70	<1	
	Hospital	Count	54	53	54	
		Min	<1	5	<1	
		Mean	<1	6	<1	
		Max	<1	20	<1	

**Table C2(a) – Summary of chemical verification monitoring – Rocky Point Water Supply Scheme**

Parameter	Unit of Measure	ADWG Value	Alby		Aquatic Centre		Christie Avenue		Hospital		Compliant
			2/10/23	2/04/24	2/10/23	2/04/24	2/10/23	2/04/24	2/10/23	2/04/24	
Colour – True	Pt/Co	≤15.0	<1	<1	<1	<1	<1	<1	<1	<1	Yes
Nitrate	mg/L	50	0.6	0.95	0.74	1	0.62	0.85	0.61	0.85	Yes
Nitrite	mg/L	3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Yes
Fluoride	mg/L	≤1.5	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	Yes
Antimony	mg/L	≤0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	Yes
Arsenic	mg/L	≤0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	Yes
Barium	mg/L	≤2.0	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	Yes
Beryllium	mg/L	≤0.06	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Cadmium	mg/L	≤0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Chromium	mg/L	≤0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Copper	mg/L	≤1.0	0.002	0.002	0.006	0.008	0.001	0.002	0.003	0.003	Yes
Iron	mg/L	≤0.3	<0.015	<0.015	<0.015	0.023	<0.015	<0.015	<0.015	<0.015	Yes
Lead	mg/L	≤0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Manganese	mg/L	≤0.1	0.0013	0.0028	0.0026	0.0112	0.0012	0.0017	0.0009	0.0021	Yes
Molybdenum	mg/L	≤0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Nickel	mg/L	≤0.02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Selenium	mg/L	≤0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	Yes
Silver	mg/L	≤0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	Yes
Uranium	mg/L	≤0.02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Mercury	µg/L	1	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	Yes
Chlorate	mg/L	0.8*	0.177	0.248	0.184	0.257	0.185	0.268	0.191	0.274	Yes
Chlorite	mg/L	0.8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	Yes
Total Trihalomethanes	µg/L	<250	<5	<5	<5	<5	<5	<5	<5	<5	Yes

\*QLD Health interim guideline

**Table C2(b) – Summary of chemical verification monitoring – Evans Landing Water Supply Scheme**

Parameter	Unit of Measure	ADWG Value	Fisheries Office – Kerr Point Drive		Iraci Avenue		Compliant
			2/10/23	2/04/24	2/10/23	2/04/24	
Colour – True	Pt/Co	≤15.0	<1	<1	<1	<1	Yes
Nitrate	mg/L	50	0.48	0.47	0.46	0.50	Yes
Nitrite	mg/L	3	<0.01	<0.01	<0.01	<0.01	Yes
Fluoride	mg/L	≤1.5	0.02	<0.02	0.02	<0.02	Yes
Antimony	mg/L	≤0.003	<0.001	<0.001	<0.001	<0.001	Yes
Arsenic	mg/L	≤0.01	<0.0002	<0.0002	<0.0002	<0.0002	Yes
Barium	mg/L	≤2.0	<0.002	<0.002	<0.002	<0.002	Yes
Beryllium	mg/L	≤0.06	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Cadmium	mg/L	≤0.002	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Chromium	mg/L	≤0.05	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Copper	mg/L	≤1.0	0.002	0.005	0.004	0.005	Yes
Iron	mg/L	≤0.3	<0.015	<0.015	<0.015	<0.015	Yes
Lead	mg/L	≤0.01	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Manganese	mg/L	≤0.1	<0.0002	<0.0002	0.0003	<0.0002	Yes
Molybdenum	mg/L	≤0.05	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Nickel	mg/L	≤0.02	<0.0005	<0.0005	<0.0005	<0.0005	Yes
Selenium	mg/L	≤0.01	<0.002	<0.002	<0.002	<0.002	Yes
Silver	mg/L	≤0.1	<0.0002	<0.0002	<0.0002	<0.0002	Yes
Uranium	mg/L	≤0.02	<0.0001	<0.0001	<0.0001	<0.0001	Yes
Mercury	µg/L	1	<0.06	<0.06	<0.06	<0.06	Yes
Chlorate	mg/L	0.8*	0.248	0.241	0.256	0.237	Yes
Chlorite	mg/L	0.8	<0.005	<0.005	<0.005	<0.005	Yes
Total Trihalomethanes	µg/L	<250	<5	<5	<5	<5	Yes

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**Table C2(c) – Summary of water quality verification chemical monitoring – Airport Water Supply Scheme**

Parameter	Unit of Measure	ADWG Value	Airport Reticulation System		Compliant
			2/10/23	2/04/24	
Colour – True	Pt/Co	≤15.0	<1	<1	Yes
Nitrate	mg/L	50	0.38	0.62	Yes
Nitrite	mg/L	3	<0.01	<0.01	Yes
Fluoride	mg/L	≤1.5	0.02	<0.02	Yes
Antimony	mg/L	≤0.003	<0.001	<0.001	Yes
Arsenic	mg/L	≤0.01	<0.0002	<0.0002	Yes
Barium	mg/L	≤2.0	<0.002	<0.002	Yes
Beryllium	mg/L	≤0.06	<0.0001	<0.0001	Yes
Cadmium	mg/L	≤0.002	<0.0001	<0.0001	Yes
Chromium	mg/L	≤0.05	<0.0005	<0.0005	Yes
Copper	mg/L	≤1.0	0.013	0.013	Yes
Iron	mg/L	≤0.3	<0.015	<0.015	Yes
Lead	mg/L	≤0.01	0.0005	0.0005	Yes
Manganese	mg/L	≤0.1	0.0004	0.0004	Yes
Molybdenum	mg/L	≤0.05	<0.0005	<0.0005	Yes
Nickel	mg/L	≤0.02	<0.0005	<0.0005	Yes
Selenium	mg/L	≤0.01	<0.002	<0.002	Yes
Silver	mg/L	≤0.1	<0.0002	<0.0002	Yes
Uranium	mg/L	≤0.02	<0.0001	<0.0001	Yes
Mercury	µg/L	1	<0.06	<0.06	Yes
Chlorate	mg/L	0.8*	1.04	0.327	No
Chlorite	mg/L	0.8	<0.005	<0.005	Yes
Total Trihalomethanes	µg/L	<250	<5	<5	Yes

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