Drinking Water Service

Annual Report 2024–2025

MOUNT ISA WATER BOARD

December 2025

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1. Executive Summary

The Mount Isa Water Board (**MIWB**) is a registered Water Service Provider (SPID: 199) under the *Water Supply (Safety and Reliability) Act 2008* (Qld).

MIWB supplies drinking water to its sole potable water customer, Mount Isa City Council (**MICC**). MIWB's Drinking Water Quality Management Plan (**DWQMP**) is a risk-based management plan that considers the key hazards to consumers and MIWB's ability to supply water, the events that may result in these hazards, and an assessment of the risks posed by these hazards and hazardous events.

The DWQMP details the operational and verification monitoring undertaken by MIWB to ensure that any drinking water quality issues are rapidly identified and responded to in accordance with the Emergency Management Framework (**EMF**). The operational and verification monitoring program implemented during the reporting period was in accordance with the relevant approved version of the DWQMP. During this reporting period, MIWB's drinking water supply has been compliant with the Australian Drinking Water Guidelines (**ADWG**) health guidelines for both verification monitoring and operational monitoring, as per the water quality criteria outlined in the DWQMP.

There were no health or aesthetic incidents during the reporting period. However, four (4) 'events' were reported to the Water Supply Regulator, which involved fires at Clear Water Lagoon and Lake Julius, and missed analyses from the current reporting period.

There was one excursion of Critical Control Points (**CCP**) for filtration turbidity. The subsequent investigations identified that this was caused by the turbidity analysers in the filter plant (Refer to *Section 4* for details).

The DWQMP review was completed by 30 June 2025, once during this period, to satisfy the two-year DWQMP review condition.

This report has been prepared in accordance with the *Guideline for the preparation, review and audit of drinking water quality management plans.*

2. Introduction

MIWB supplies bulk water to one potable customer and semi-treated water to several industrial customers.

Key business activities include:

- Managing the infrastructure required to transport bulk water from storages at Lake Moondarra and Lake Julius to customers and applying appropriate water treatment processes to comply with MIWB's legislative and commercial requirements.
- Conducting ongoing investigations and planning for future infrastructure requirements relevant to MIWB operations.
- Constructing, operating, and maintaining the bulk water transport and treatment infrastructure necessary to MIWB operations; and
- Acting as trustee for the Water and Recreation Reserve 48 (**R48**) on behalf of the Department of Natural Resources and Mines, as administrator of the Land Act 1994.

This annual report documents the performance of MIWB, a registered Water Service Provider (SPID: 199) under the *Water Supply (Safety and Reliability) Act 2008* (Qld), with respect to its Drinking Water Quality Management Plan (DWQMP) as required under the *Water Supply (Safety and Reliability) Act 2008* (the Act) for the Financial Year 2024–2025. Only the supply system components involved in supplying potable water are included in the MIWB DWQMP.

Using the Australian Drinking Water Guidelines (**ADWG**) and a risk-based approach, MIWB's DWQMP has been developed to protect public health by identifying and minimising any public health-related risks associated with drinking water. MIWB operates under the DWQMP approved by the water supply regulator within the Department of Local Government, Water and Volunteers (**DLGWV**).

The monitoring plan under the DWQMP comprises monitoring several microbial, physical, and chemical parameters.

The annual report comprises an overview of the below:

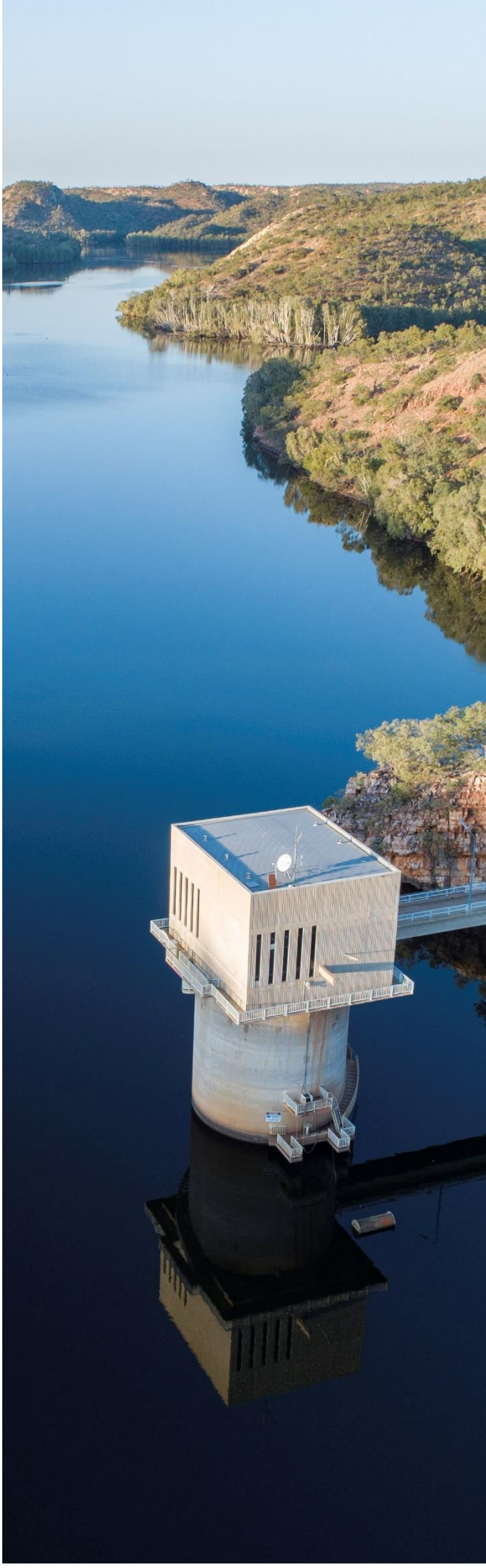
1. Activities MIWB undertook in the reporting period related to the supply of drinking water.
2. Summary of water quality; and
3. MIWB's performance in implementing the Risk Management Improvement Plan (**RMIP**).

3. Source Water

MIWB operates a single scheme which encompasses both Lake Julius and Lake Moondarra (**Table 1**). Lake Moondarra is the primary supply, with Lake Julius used during periods of low supply or to supplement for water quality purposes. Lake Julius represents a drought mitigation strategy for the city of Mount Isa. Either water source can be used to supply water to Clear Water Lagoon (**CWL**) before being pumped to the treatment plant at Mount Isa Terminal reservoir (**MITR**).

Table 1. Summary of schemes

Water Source	Treatment Processes	Treatment Plant
Lake Moondarra	Microfiltration, chlorination	MITR
Lake Julius	Microfiltration, chlorination	MITR



3.1 Source Water Quality

MIWB has undertaken sampling and part of the analyses (**Table 2**), while most of the analyses have been conducted by an external National Association of Testing Authorities (**NATA**)-accredited laboratory.

3.1.1 Catchment Risk

Version 7.2 of the DWQMP, approved in May 2024, was one of the applicable versions for the reporting period. This version incorporated the microbial risk assessment conducted by MIWB Operations, which evaluated microbial risk levels and loads within the catchments using an extensive dataset. The study classified the catchments as Category 3, and the findings have informed subsequent risk assessments. This data has also been incorporated into the newly reviewed version 8, which is currently pending approval.

Table 2. Parameters monitored in raw water

Microbiological	Physical	Chemical
Escherichia Coli (***E. coli***) and Total coliforms	Temperature	PFAS
Protozoa	pH	Pesticides
Cyanobacteria	Conductivity	Metals, Non-metals
	Turbidity	Nutrients
	Dissolved Oxygen	Total Organic Carbon (**TOC**)
	Colour	Cyanotoxins
	Alkalinity, Hardness	

3.1.2 Microbial Load

There were no detections of Cryptosporidium in any of the water bodies during the reporting period. The *E. coli* in the raw water sources averaged 2.33, 1.78, and 2.59 MPN/100 mL in Lake Julius, Lake Moondarra, and Clear Water Lagoon, respectively.

3.1.3 Turbidity

Raw water extraction is an Operational Control Point (**OCP**) critical to maintaining the quality of the non-potable water supply. While a loss of control at this OCP does not directly result in non-compliance, it remains an essential process that is monitored regularly. The turbidity of Lake Moondarra exceeded the OCP limit (**Table 3**), necessitating the addition of coagulant; however, CWL, as an isolated storage reservoir, was not impacted.

Table 3. Source water turbidity (NTU)

	Lake Julius	Lake Moondarra	Clear Water Lagoon
Average	6.04	4.84	2.17
Max	11.1	27.3	3.42
Min	1.54	1.02	0.50

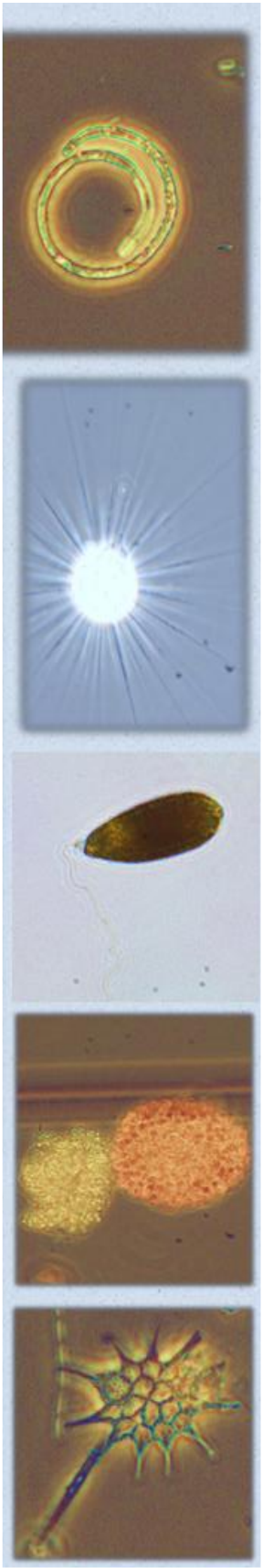


Figure 2. Microscopic images of algae from Clear Water Lagoon

3.1.4 Cyanobacteria

Cyanobacteria or Blue-Green Algae (**BGA**) levels fluctuated with due to temperature variations across all raw water sources, with the storage reservoir and Clear Water Lagoon's total BGA count approaching 250,000 cells/ml in summer (**Figure 1**). The dominant species in CWL was Synechococcales, which does not produce cyanotoxins.

Blue-green Algae Cell Counts in Clear Water Lagoon

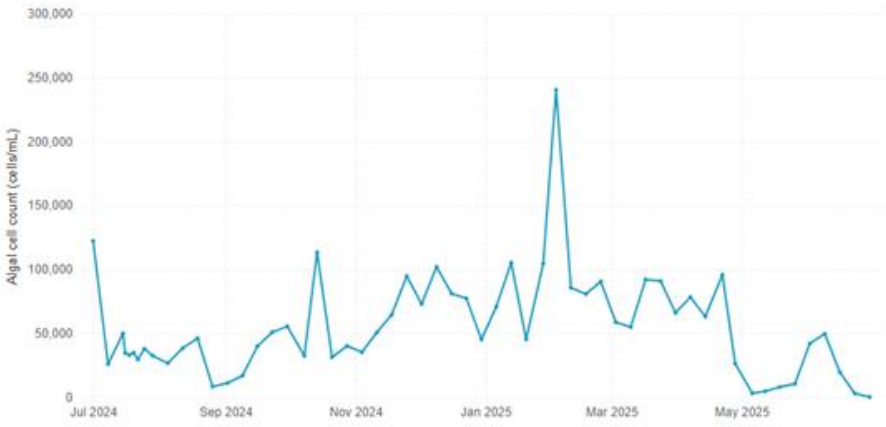


Figure 1. Fluctuations of BGA throughout the year (2024-25)

The toxic species (Refer to section 4.1 for treatment or removal) of concern, Raphidiopsis raciborskii, produces the toxin cylindrospermopsin; however, it can be effectively neutralised by treatment (Refer to section 4.2 for treatment or removal).

Clear Water Lagoon Blue-green Algae Species Toxicity

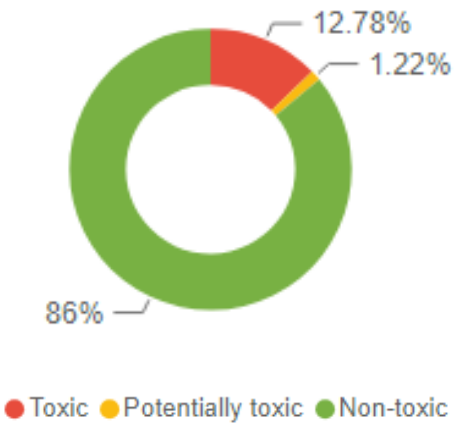


Figure 3. Clear Water Lagoon species toxicity (2024-25)

3.1.5 Per- and Polyfluoroalkyl Substances (PFAS)

The various PFAS classes were tested in the source water lakes in accordance with the monitoring plan. There were no detections above the ADWG (**Table 4**).

Table 4. PFAS in raw water supplies

Scheme Component	Parameter	Sample Number	Units	Min	Max	Average	ADWG HBV[1]	Number of Non-Compliant Samples	Comments
Lake Julius	PFOS	3	µg/L	<0.002	<0.002	<0.002	0.008	0	No previous individual ADWG limit
	PFHxS	3	µg/L	<0.002	<0.002	<0.002	0.030	0	No previous individual ADWG limit
	PFOA	3	µg/L	<0.002	<0.002	<0.002	0.200	0	Previous ADWG HBGV limit 0.56µg/L
	PFBS	3	µg/L	<0.002	<0.002	<0.002	1.000	0	No previous ADWG limit
Lake Moondarra	PFOS	3	µg/L	0.003	0.0043	0.0035	0.008	0	No previous individual ADWG limit
	PFHxS	3	µg/L	0.002	0.0029	0.0025	0.030	0	No previous individual ADWG limit
	PFOA	3	µg/L	<0.002	0.001	<0.001	0.200	0	Previous ADWG HBGV limit 0.56µg/L
	PFBS	3	µg/L	<0.001	0.0011	<0.002	1.000	0	No previous ADWG limit

[1] ADWG limits updated in June 2025.

Note: Results below the detection limit were considered to have a value of zero for statistical analysis.

4. Water Treatment Plant Performance

The two components of treatment are microfiltration and multi-stage chlorination.

4.1 Microfiltration

Table 5. Daily volume of water supplied (ML) to MICC during FY 2024-25

Minimum	*Maximum*	*Average*
10.24	**33.20**	**20.45**

Two critical control points (**CCP**), membrane filtration and final disinfection**,** have been identified within the system and are actively monitored. These CCPs are implemented to prevent process excursions that lead to non-compliant water.

One CCP event was recorded in this reporting period related to turbidity excursions at one of the filter plants, which tripped the plant. The plant remained offline while the O&M team investigated and corrected the issue with the turbidity analyser, after which normal production resumed. Microfiltration successfully removed 100% of algal cells in the feed water during the reporting period.

4.2 Chlorination

4.2.1 Disinfection

Drinking water treated by MIWB for our sole potable water customer, Mount Isa City Council (**MICC**), continued to meet the ADWG throughout the reporting period, with no detections of E. coli in any drinking water samples, achieving a rolling compliance value of 100% (**Table 11**). The multi-stage chlorination was also effective at neutralising cyanotoxins.

4.2.2 Disinfection By-products

The concentrations of disinfection by-products also continued to meet the ADWG throughout the reporting period (**Figure 4**). Total and individual Trihalomethanes (**THMs**) and Haloacetic Acids (**HAAs**) concentrations are reported in the verification monitoring table (**Table 10**).

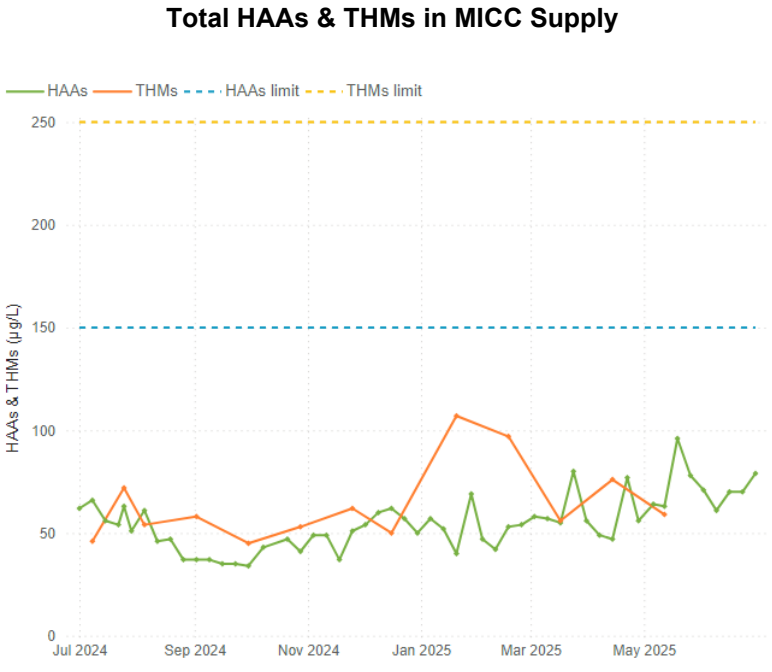


Figure 4. Disinfection by-products in potable supply (2024-25)

5. Capital Projects 2024–2025

The following capital projects demonstrate the actions that are undertaken to continually improve our water quality performance and system resilience:

Table 6. Capital Projects Completed in 2024-25

Fred Haigh Pump Station (FHPS) switchyard and switch room upgrade
The completion of Stage 4 works marked the final milestone in this multi-year upgrade, which included installing a new low-voltage (**LV**) switchboard and automatic transfer switch, thereby enhancing resilience and electrical safety.
Flow meter upgrades
MIWB replaced four flow meters across the network, improving the ability to capture critical system data and monitor performance with greater accuracy.
MITR clean water segregation
This initiative further strengthened potable water quality by eliminating potential risks through targeted pipework modifications and improved segregation within the MITR system.
MICC diesel backup
To ensure service continuity during extended power outages, MIWB delivered a mobile backup system, incorporating a generator, a new distribution board, and a pump to maintain water supply to the community and residents of Mount Isa.
Corporate Information and Communications Technology (ICT) overhaul
MIWB completed a major overhaul and replacement of its corporate technology infrastructure, significantly reducing the risk of system failures and enhancing network security and performance. These improvements support robust and secure operations across the organisation, enabling more efficient service delivery.

6. DWQMP implementation

6.1 Conditions of Approval and Compliance

The following table demonstrates our compliance with the conditions of approval of our DWQMP:

Table 7. DWQMP Conditions and Status of Compliance

DWQMP Approval Conditions	Status of Compliance
Water quality criteria and event reporting An "event" is any occurrence or potential occurrence within the drinking water service that cannot be managed under the approved DWQMP and may affect public health. Events include the detection of parameters with aesthetic guideline values used as indicators for other hazards (e.g., turbidity), detection of unregulated parameters that may harm public health (e.g., chlorate), or failure to complete required water quality testing as outlined in the DWQMP.	Missed samples from the monitoring plan in the current approved version of the DWQMP were reported as detailed in Table 12. Except for the above, MIWB remained compliant with this condition.
If, due to verification or other monitoring activities, including a research program or monitoring by another entity, an incident in the drinking water service is identified, the regulator must be immediately notified of the circumstances unless a reasonable excuse exists. This initial notification must be followed up with a written notice in the approved form provided to the regulator as soon as practicable.	Compliant
If an event is identified in the drinking water service, the regulator must be notified immediately, unless there is a reasonable excuse, and a written notice in the approved form must be issued as soon as possible. An investigation report, using the approved form, must also be submitted promptly, detailing the cause of the event, actions taken to address it, and proposed measures to prevent or minimise recurrence.	Compliant
The regulator's formal acknowledgment for research activities may be sought by submitting the Research Project Notification form.	Compliant
The next regular review of the approved DWQMP, to ensure its accuracy and relevance to the drinking water service provided, must be completed by 30 June 2025 and at the intervals specified in section 8	Compliant

of this notice, following the regulatory guidelines established by the regulator.	
The next audit of the approved DWQMP must be completed by 30 June 2024 and at the intervals specified in section 8 of this notice, in accordance with section 108 of the Act and the regulatory guidelines for conducting DWQMP audits and preparing audit reports.	Compliant *Next audit to be completed by 30 June 2028.*
No liability is accepted by the State of Queensland for any financial costs incurred in implementing and complying with the approved DWQMP and its conditions.	No claims
HAAs analysis to report individual results for chloroacetic acid, dichloroacetic acid, and trichloroacetic acid to ensure compliance with ADWG health limits.	Compliant

6.2 Governance and Change Management

During the reporting period, MIWB undertook organisational changes, including the formation of a Process, Compliance and Quality (**PCQ**) Team within the Operations Department. The PCQ Team is responsible for managing and implementing the DWQMP, including water quality monitoring, laboratory operations, and overseeing external laboratory sampling and analysis. This also included the appointment of a Graduate Laboratory Technician.

The Process, Compliance, and Quality Team provides regular updates to the Management Team during meetings on water quality processes, circumstances, and outcomes. Water quality discussions are also held with Asset Management, Operations and Maintenance (**O&M**), and the Capital Works Teams as required.

6.3 Risk assessment

The Operations Department is involved in Change Management Risk Assessments for operational and infrastructure changes, as necessary, to identify any implications for water quality and to determine how these risks (if any) will be mitigated.

Refer to Table 8. Risk management improvement program (**RMIP**) implementation status for further details of risk management and improvement processes.

6.4 Risk Improvement Program

The actions undertaken to implement the Risk Management Improvement Program (RMIP) are discussed in *Table 8*.

The risk improvement action items include carry-over items from DWQMP version 6.1, as well as indicating the status of the risk improvement projects identified in the two-yearly review of the DWQMP completed in June 2023, and approved by the Water Supply Regulation unit within the DLGWV in May 2024.

Table 8. Risk Management improvement Program implementation Status

RMIP Reference	Improvement Actions	Status	Status Comments	Target Date
DWQMP RMIP 5.0 (WS-2)	Reduced pressure zones (**RPZ**) or multiple backflow prevention valves with MIWB maintenance where there may currently be only one valve.	Completed		N/A
DWQMP RMIP 6.1 (HE-11/25/28)	Ultraviolet (**UV**) disinfection project (renamed to second barrier investigation)	Investigation Stage	Included in options and concept design of 5-year CAPEX program	2026
DWQMP RMIP 6.1 (HE-15/18)	Ultrasonics for Clear Water Lagoon investigation.	Completed		N/A
DWQMP RMIP 6.1 (HE-34)	Discuss source selection with customers to agree to use Lake Julius to lower Halo Acetic Acids (HAA). However, requires agreement from the customers who own the water (RMIP from 2018). 21/22 Online total organic carbon (**TOC**) & Specific Ultraviolet Absorbance (**SUVA**) analysis at MITR lead indicator for chlorination strategy UV disinfection project may assist in chlorine optimisation and meeting Log Reduction	Investigation Stage	Included in options and concept design of 5-year CAPEX program.	2027

RMIP Reference	Improvement Actions	Status	Status Comments	Target Date
	Values (**LRV**). New gas chlorination to provide better control of chlorination			
DWQMP RMIP 6.1 (HE-35)	Potential cross connection will be removed Online turbidity monitoring to be installed on final water	Completed	Included in the options and concept design of the 5-year CAPEX program.	N/A
DWQMP RMIP 6.1 (WS-2)	Actuated valve on raw water outlet of 50ML to be programmed to close when not pumping to Mount Isa Mines (**MIM**).	Investigation Stage	Included in the options and concept design of the 5-year CAPEX program.	2028
DWQMP RMIP 6.1 (WS-5)	Upgraded gas chlorine for better control of chlorination Real time monitoring of Water Quality - turbidity, TOC, colour, Dissolved Oxygen (DO), Conductivity, pH, Temp, Ultraviolet- Transmittance (UVT).	Investigation Stage	Included in the options and concept design of the 5-year CAPEX program.	2027
DWQMP RMIP 7.1 HE-2 2023	Investigate automation or remote operation of the flocculation system (2023)	Investigation Stage	Included in options and concept design of 5-year CAPEX program.	2025
DWQMP RMIP 7.1 HE-2 2023	Investigate issue with Lake Julius Profiling Sonde and rectify (2023)	Investigation Stage	Included in options and concept design of 5-year CAPEX program.	2027
DWQMP RMIP 7.1 HE-11 2023	Revise Operational Control Point (OCP) procedure to include a limit of up to 50 Nephelometric Turbidity Units (NTU) with flocculation/ coagulation.	Completed		N/A
DWQMP RMIP 7.1 HE-3, 4, 15, 17, 18, 19, 33 2023	Investigate options for an additional barrier that can assist in reducing algal toxin risk (e.g. ozone).	Investigation Stage	Operational investigation using algaecide in the CWL progress. Completed.	2026

RMIP Reference	Improvement Actions	Status	Status Comments	Target Date
DWQMP RMIP 7.1 HE-22 2023	Investigate feasibility of direct pumping from Lake Moondarra	Completed.	Potential to include post 2030.	N/A
DWQMP RMIP 7.1 HE-27 2023	Investigate a project to review the integrity of the 50 Mega Litre (**ML**) tank and seal. Options may include lining and roof replacement	Completed	Review done every year with the diver inspections. Not flagged to be lined or replaced.	N/A
DWQMP RMIP 7.1 HE-25 2023	Progress current project for investigating improving output volume and performance of filter plants: • Condition assessment • Review of operations manual • Refresher training for operational staff	Completed		N/A
DWQMP RMIP 7.1 HE-38 2023	Investigate options for backflow prevention on the return chlorine lines and service water lines	Investigation Stage	Included in options and concept design of 5-year CAPEX program.	2027
DWQMP RMIP 7.1 WS-3 2023	Commence a project to investigate replacement of chlorine system at Pump 7 and include automation.	Investigation Stage	Included in options and concept design of 5-year CAPEX program.	2027
DWQMP RMIP 7.1 2023	Investigate options for Cert 3 training in Water Operations for relevant staff.	Completed.	Structural change resulted in external contractor undertaking water operations. Revised Operations and Maintenance Agreement (OMA) will include requirements for all personal operating MIWB water infrastructure to obtain the Cert 3 training.	N/A

6.5 Monitoring Plan – water quality information and summary

This section discusses compliance with the water quality criteria.

6.5.1 Operational Monitoring

Table 9. Drinking Water Quality Performance – Operational monitoring

Scheme name	Scheme component	Parameter	# samples required	# samples taken	Min	Max	Mean	ADWG HBGV	# HBGV exceedances	Units	Level of reporting (LOR)	Comments
Lake Julius & Lake Moondarra	MITR	Dissolved Oxygen	52	53	85.9	105.5	97.2	<85[1]	0	% saturation	1	
	MITR	pH	52	53	7.14	8.08	7.66	6.5 – 8.5[1]	0	pH	2.00	
	MITR	Colour	52	61	<3	4	<3	<15[1]	0	Pt-Co units	3	
	MITR	Turbidity	52	59	0.06	0.59	0.13	<5	0	NTU	0.01	
	MITR	Free Chlorine	365	731	1.0	2.39	1.71	<5	0	mg/L	0.04	
	MITR	Total Chlorine	52	53	1.59	2.13	1.89	<5	0	mg/L	0.04	
	MITR	Algal cell count	As per BGA Manual	4	ND	27	6.75	N/A	N/A	cells/mL	5	Total cell count ND – not detected

[1] Aesthetic guideline values only
Note: Results below the detection limit were considered to have a value of zero for statistical analysis.

6.5.2 Verification monitoring

Table 10. Drinking water quality performance – Verification monitoring

Scheme name	Parameter	# samples required	# samples taken	Min	Max	Mean	ADWG HBGV	# HBGV exceedances	Units	Level of reporting (LOR)	Comments
Lake Julius & Lake Moondarra	*Escherichia coli*	52	58	<1	<1	<1	<1	0	MPN/100mL	1	
	Total Coliforms	52	58	<1	<1	<1	N/A	N/A	MPN/100mL	1	
	Cyanotoxins	As required by BGA manual	56	<0.04	0.28	0.14	<1	0	µg/L	0.04	Results from in-house via ELISA method

Scheme name	Parameter	# samples required	# samples taken	Min	Max	Mean	ADWG HBGV	# HBGV exceedances	Units	Level of reporting (LOR)	Comments
	Cyanotoxins	As required by BGA manual	4	<0.05	<0.05	<0.05	<1	0	µg/L	0.05	Results from NATA accredited lab
	Ammonia	4	4	<0.01	0.04	0.015	<0.5[1]	0	mg/L	0.01	
	Cyanide	1	1	<0.004	<0.004	<0.004	<0.08	0	mg/L	0.004	
	Nitrate	4	4	<0.01	0.14	0.053	<50	0	mg/L	0.01	
	Nitrite	4	5	<0.01	<0.01	<0.01	<3	0	mg/L	0.01	
	Aluminium	4	14	<0.005	<0.005	<0.005	<0.2[1]	0	mg/L	0.005	
	Antimony	4	4	<0.001	<0.001	<0.001	<0.003	0	mg/L	0.001	
	Arsenic	4	4	0.001	0.002	0.0015	<0.01	0	mg/L	0.001	
	Cadmium	4	4	<0.0001	<0.0001	<0.0001	<0.002	0	mg/L	0.0001	
	Chromium	4	4	<0.001	<0.001	<0.001	<0.05	0	mg/L	0.001	
	Copper	4	18	<0.001	0.007	0.003	<2	0	mg/L	0.001	
	Iron	52	53	<0.05	<0.05	<0.05	<0.3[1]	0	mg/L	0.05	
	Lead	52	53	<0.001	0.003	<0.001	<0.005[3]	0	mg/L	0.001	Previous ADWG limit 0.01mg/L
	Manganese	52	53	<0.001	0.154	0.008	<0.1[3]	0	mg/L	0.001	Previous ADWG limit 0.005mg/L
	Nickel	4	4	<0.001	<0.001	<0.001	<0.02	0	mg/L	0.001	
	Zinc	4	13	<0.005	0.007	<0.005	<3[1]	0	mg/L	0.005	
	Chloride	4	4	38	45	40	<250[1]	0	mg/L	1	
	Fluoride	4	4	0.2	0.4	0.3	<1.5	0	mg/L	0.1	
	Hydrogen Sulphide	4	4	<0.01	<0.01	<0.01	<0.05[1]	0	mg/L	0.01	
	Sodium	4	4	27	37	33.5	<180[1]	0	mg/L	1	
	Sulphate	4	4	11	17	14	<250[1]	0	mg/L	1	
	Total Trihalomethanes	12	14	0.045	0.107	0.063	<0.250	0	mg/L	0.005	

Scheme name	Parameter	# samples required	# samples taken	Min	Max	Mean	ADWG HBGV	# HBGV exceedances	Units	Level of reporting (LOR)	Comments
	Chloroacetic Acid	12	54	0.002	0.005	0.003	<0.15	0	mg/L	0.001	
	Dichloroacetic Acid	12	54	0.011	0.030	0.019	<0.1	0	mg/L	0.001	
	Trichloroacetic Acid	12	51	0.006	0.036	0.014	<0.1	0	mg/L	0.001	
	Bromoacetic Acid	12	54	<0.005	<0.005	<0.005	N/A	N/A	mg/L	0.005	
	Bromochloroacetic Acid	12	54	0.006	0.015	0.010	N/A	N/A	mg/L	0.001	
	Bromodichloroacetic Acid	12	54	0.004	0.013	0.007	N/A	N/A	mg/L	0.001	
	Dibromoacetic Acid	12	54	<0.001	0.004	0.002	N/A	N/A	mg/L	0.001	
	Dibromochloroacetic Acid	12	54	<0.010	<0.010	<0.010	N/A	N/A	mg/L	0.010	
	Tribromoacetic Acid	12	54	<0.010	<0.010	<0.010	N/A	N/A	mg/L	0.010	
	Total Haloacetic Acids	12	54	0.034	0.096	0.055	<0.1[2]	0	mg/L	0.001	
	2-Methylisoborneol (MIB)	1	1	3.1	3.1	3.1	N/A	N/A	ng/L	1.0	
	Geosmin	1	1	1.4	1.4	1.4	N/A	N/A	ng/L	1.0	
	Total Dissolved Solids	4	4	208	233	220	<600[1]	0	mg/L	10	
	Conductivity	52	53	264	386	333	N/A	N/A	µS/cm	0.01	
	Hardness	4	4	70	78	75	<200[1]	0	mg/L	1	Hardness as $CaCO_3$

[1]Aesthetic guideline values only
[2]No ADWG limit; Queensland Health Department advisory limit
[3]ADWG limit updated in June 2025

Note: Results below detection limit were considered to have a value of zero for statistical analysis.

6.5.2 *E.coli* compliance

Table 11. *E. coli* compliance with annual value

Drinking Water Scheme	Lake Julius & Lake Moondarra											
Year	2024 – 2025											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	5	4	5	4	4	5	4	4	5	4	4	5
No. of samples collected in which ***E. coli*** is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12-month period	57	55	55	57	57	57	58	57	58	58	57	58
No. of failures for 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**

7. Incidents reported

There were 4 events (**Table 12**) reported to the regulator during the FY 2024-2025.

Table 12. Summary of reported incidents

Case No.	Date of Incident/Event	Brief Description	Actions Undertaken	Status
DWI-199-24-11106	**24/07/2024**	**CYANOBACTERIA DETECTION AT TREATMENT PLANT** Cylindrospermopsin detected in part of the treatment plant by the external lab. Investigated and found that detection was cause by lab error.	Nil.	Closed
DWI-199-24-11276	**13/09/2024**	**FIRE BEHIND CLEAR WATER LAGOON** Bush fire approached areas adjacent to Clear Water Lagoon.	Nil.	Closed
DWI-199-24-11283	**19/09/2024**	**MISSED *E. COLI* ANALYSIS 2024** *E. coli* analysis was not completed as per the monitoring plan by the external lab due to sample being impacted by logistics issue.	Nil.	Closed
DWI-199-24-11484	**15/11/2024**	**FIRE NEAR LAKE JULIUS** Controlled burns conducted by a station owner became unmanageable, resulting in a significant fire spread in the Lake Julius area, placing the Fred Haigh pump station and associated infrastructure at risk.	Nil.	Closed

8. Customer complaints

This section discusses details of any complaints received about the drinking water service.

MIWB did not receive any formal water-quality complaints (**Table 13**) from its drinking water customers during the 2024-25 financial year.

Table 13. Customer complaints about water quality

Scheme	Health Concern	Dirty Water	Taste & Odour	Other
Lake Julius & Lake Moondarra	0	0	0	0
Total	**0**	**0**	**0**	**0**

9. DWQMP review outcomes

The two-yearly review of the plan was completed during the 2024-25 reporting period. As a result of the review, version 8.0 was submitted to the department on 5 August 2025. This version included changes to the monitoring plan and an overhaul of the Risk Assessment methodology. The current version of the plan remains 7.2, as version 8.0 is pending regulatory approval.

10. DWQMP audit outcomes

The 4-yearly regular audit did not fall into the 2024-25 reporting period.

Glossary

ADWG	Australian Drinking Water Guidelines (2011) Published by the National Health and Medical Research Council of Australia
BGA	Blue-green Algae
CCP	Critical control point is the process step to which control can be applied and is essential to prevent a safety hazard
CFU/100mL	Colony forming units per 100 millilitres
CWL	Clear Water Lagoon
DBPs	Disinfection by-products
DRDMW	Department of Local Government, Water and Volunteers
E. coli	*Escherichia coli,* a bacterium which is considered to indicate the presence of faecal contamination and therefore potential health risk
HAA	Haloacetic acid, a disinfection by-product formed by the reaction of halogens and organic acids
mg/L	Milligrams per litre
MITR	Mount Isa Terminal Reservoir
MPN/100mL	Most probable number of microorganisms per 100 millilitres
NATA	National Association of Testing Authorities
ng/L	Nanograms per litre
NTU	Nephelometric Turbidity Units
O&M	Operations & Maintenance, usually referring to a third-party contractor
PCQ	Process, Compliance & Quality Team – part of the Operations Department at Mount Isa Water Board
PFAS	Per- and polyfluoroalkyl substances
Pt-Co Units	Platinum Cobalt units
RMIP	Risk Management Improvement Program
RPZ	Reduced Pressure Zone
SCADA	Supervisory Control and Data Acquisition
SPID	Service Provider Identification
THMs	Trihalomethanes, a disinfection by-product formed by the reaction of halogens and organic compounds
µg/L	Micrograms per litre
µS/cm	MicroSiemens per centimetre
>	Greater than
<	Less than

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