Cairns
REGIONAL COUNCIL

Annual Report 2024-2025

Drinking Water Service

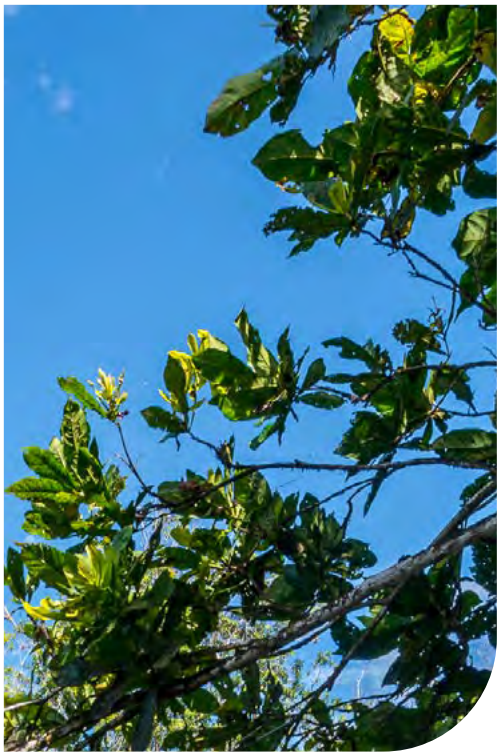
SPID 477

Contents

Acknowledgement of Country

Cairns Regional Council acknowledges the First Peoples within our region who are the Traditional Custodians of this country: the Djabugay; Yirriganydji; Bulawai; Gimuy Walubara Yidinji; Mandingalbay Yidinji; Gunggandji; Dulabed and Malanbara Yidinji; Wanyurr Majay; Mamu and NgadjonJii peoples.

We pay respect to Elders past, present and future and extend that respect to all other Aboriginal and Torres Strait Islander Australians within our region.



2.0 Glossary of acronyms

ADWG	Australian Drinking Water Guidelines (2011). Published by the National Health and Medical Research Council of Australia
BWA	Boil Water Advisory
DLGWV	Department of Local Government, Water and Volunteers
DWQMP	Drinking Water Quality Management Plan
DWQMS	Drinking Water Quality Management System
NATA	National Association of Testing Authorities, Australia
OFI	Opportunity for Improvement
RMIP	Risk Management Improvement Program
SCADA	Supervisory Control and Data Acquisition
SWIM	Statewide Water Information Management: a database used by Water Service Providers to report data on water and sewerage services to numerous State and Commonwealth agencies
UV	Ultraviolet
VMP	Verification Monitoring Program
WTP	Water Treatment Plant

3.0 Executive Summary

The Cairns Regional Council (Council) 2024-2025 Drinking Water Service Annual Report describes operational performance and results of tests taken to verify drinking water quality for the period 1 July 2024 to 30 June 2025. Submitted annually to the regulator to fulfill Council's obligation under the *Water Supply (Safety and Reliability) Act 2008*, this report also outlines how Council has adhered to its Drinking Water Quality Management Plan (DWQMP), met the plan's approval conditions, and otherwise complied with the requirements of the *Public Health Act 2005*.

This report includes:

- A summary of activities undertaken to operate the drinking water service
- Drinking water quality results
- The record of Council's performance in implementing the approved DWQMP, including:
  - compliance with drinking water criteria,
  - reportable incidents, and
  - customer complaints

This report is made available to our customers via Council's public website, upon request through email to council@cairns.qld.gov.au, or in person at the Customer Service Centre, 119-145 Spence Street, Cairns. In addition to our customers and drinking water regulators, interested parties for these report particulars may include:

- Other government agencies
- Researchers and the water industry
- Businesses and other industry
- Current, past and future employees

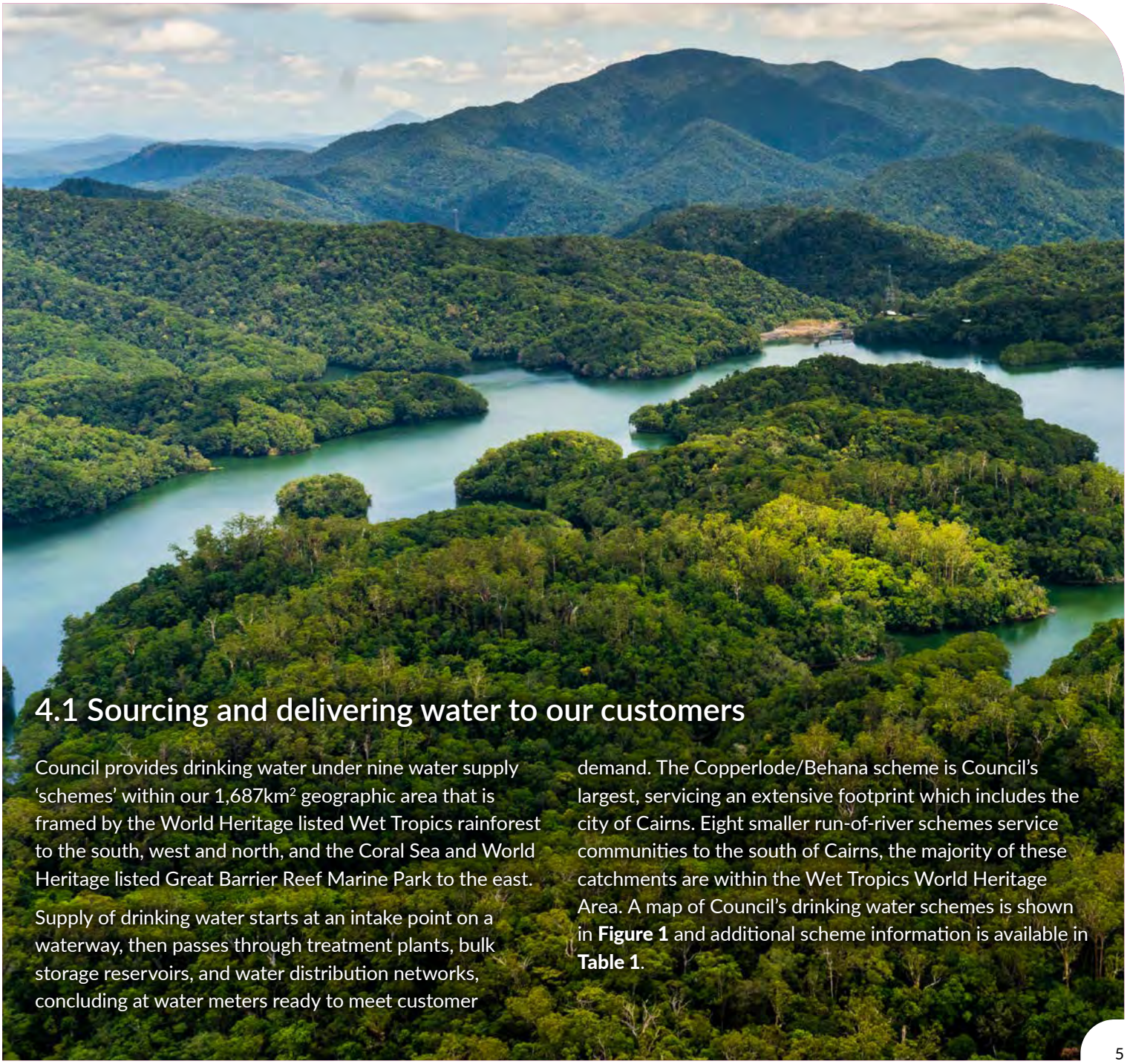
4.0 Overview

Cairns Regional Council prioritises the supply of consistently safe drinking water and the protection of human health, delivering services including drinking water to a population of over 170,000. Council systematically manages drinking water quality and compliance through a developed Drinking Water Quality Management System (DWQMS), which utilises a risk-based "catchment to tap" approach to identify and manage potential risks associated with drinking water quality, consistent with the Australian Drinking Water Guidelines (ADWG) Framework for Management of Drinking Water Quality (National Health and Medical Research Council of Australia, 2011). The information provided in this report demonstrates Council's ongoing commitment to its role in catchment to tap drinking water risk management across our local government area.

Council's Drinking Water Quality General Policy assigns responsibility for the management of drinking water quality to all Cairns Infrastructure and Assets Directorate staff whilst acknowledging that corporate responsibility lies with the Management team and ultimately the Chief Executive Officer. The purpose of the policy, as endorsed by the Chief Executive Officer, is "to support the implementation and maintenance of a Drinking Water Quality Management System consistent with the Australian Drinking Water Guidelines."

A copy is available to the public via the following link:

Drinking Water General Policy



4.1 Sourcing and delivering water to our customers

Council provides drinking water under nine water supply 'schemes' within our 1,687km^2 geographic area that is framed by the World Heritage listed Wet Tropics rainforest to the south, west and north, and the Coral Sea and World Heritage listed Great Barrier Reef Marine Park to the east.

Supply of drinking water starts at an intake point on a waterway, then passes through treatment plants, bulk storage reservoirs, and water distribution networks, concluding at water meters ready to meet customer demand. The Copperlode/Behana scheme is Council's largest, servicing an extensive footprint which includes the city of Cairns. Eight smaller run-of-river schemes service communities to the south of Cairns, the majority of these catchments are within the Wet Tropics World Heritage Area. A map of Council's drinking water schemes is shown in **Figure 1** and additional scheme information is available in **Table 1**.

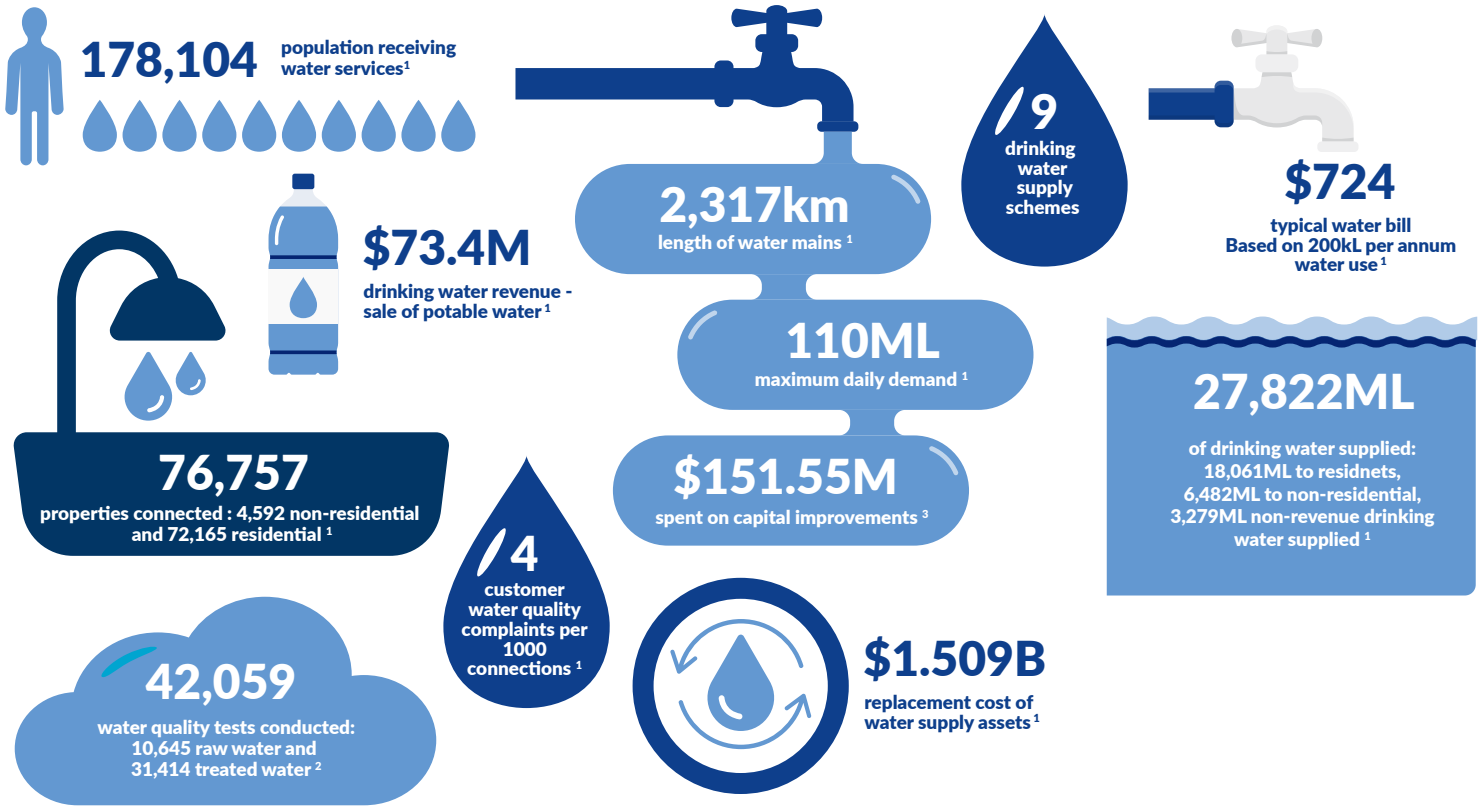
Figure 1: Scheme boundaries

Table 1: Summary of Cairns Regional Council drinking water supply schemes

Scheme name	Water source	Communities served	Catchment Characteristics	Treatment barriers	Total connected properties[1]	Population receiving water services[1]
Copperlode / Behana	Copperlode Dam via Freshwater Creek	Goldsborough, Gordonvale, Bessie Point, the suburbs of greater Cairns from Edmonton in the South to Buchan Point in the North	National Park World Heritage State Forest	Belt screen Coagulation Flocculation Direct filtration pH correction Chlorination	75,134	174,321
	Behana Creek		National Park World Heritage	Coandă screen Drum micro strainer UV Chlorination		
Babinda	Frenchman Creek	Babinda	National Park World Heritage	0.5mm Coandă Microscreen 50 micron filter 1 micron filter UV Chlorination	743	1,678
Bartle Frere	Majuba Creek	Bartle Frere and Woopen Creek	National Park World Heritage	0.5mm Coandă Microscreen 50 micron filter 1 micron filter UV Chlorination	158	387
Bellenden Ker	Junction Creek	Bellenden Ker	National Park World Heritage	0.5mm Coandă Microscreen 50 micron filter 1 micron filter UV Chlorination	119	289
Bramston Beach	Worth Creek	Bramston Beach	World Heritage	0.5mm Coandă Microscreen 50 micron filter 1 micron filter UV Chlorination	157	378
Fishery Falls	Fishery Creek	Fishery Falls	National Park World Heritage	0.5mm Coandă Microscreen Amiad 2 micron auto flush filtration system UV Chlorination	190	444
Mirriwinni	Pugh Creek	Mirriwinni	National Park World Heritage	0.5mm Coandă Microscreen 50 micron filter 1 micron filter UV Chlorination	199	471
Mountain View	Little Mulgrave River	Mountain View	National Park World Heritage Rural and Rural Residential	50 micron filter 1 micron filter UV Chlorination	35	84
Orchid Valley	Little Mulgrave River	Orchid Valley	National Park World Heritage Rural and Rural Residential	50 micron filter 1 micron filter UV Chlorination	22	52
Russell Heads[2]						

[1] Data sourced from 24/25 SWIM reporting. Indicators used: CS4 Total connected properties: water, CS1 Population receiving water services
[2] Russell Heads is a non-potable supply.

4.2 2024-2025 drinking water summary



Data sources:

[1]SWIM 2024/2025 Indicators: CS1, AS2, CS2, CS3, CS4, WA74, WA32, WA34, WA36, WA201, PR43, FN39, FN59, FN74, CS9
[2]Council Laboratory database aggregated statistics tables #7729456
[3]Council Finance Department #7732813

4.3 Legislative requirements

The supply of safe and reliable drinking water in Queensland is regulated by state government legislation, including the *Water Supply (Safety and Reliability) Act 2008* and the *Public Health Act 2005*. Health guideline values set by the national ADWG are incorporated into the Queensland drinking water quality criteria through the Public Health Regulation 2018.

Under the *Water Supply (Safety and Reliability) Act 2008*, the Department of Local Government, Water and Volunteers (DLGWV) assesses and approves Council's Drinking Water Quality Management Plan and regulates that drinking water services are conducted in accordance with the approved plan. Queensland Health further regulates drinking water quality to protect public health under the *Public Health Act 2005*, including application of an established Escherichia coli (*E. coli*) standard.

4.4 Framework for Managing Drinking Water

Council's DWQMS is a structured systems management approach that defines roles and responsibilities and underpins the setting of priorities and allocation of resources. It is framed around the following core elements:

- Organisational commitment
- Planning and risk assessment
- Asset management and renewal
- Hazard analysis and critical controls
- Preventative measures
- Monitoring and verification
- Information management
- Incident management
- Continuous improvement

The DWQMP then sets out the detailed actions and measures Council uses to manage water quality risks at each stage of the water supply process. The approved plan outlines, for example, the methodology for hazard identification and risk assessment, the specifics of verification and operational monitoring plans, all documented control measures, and scenario-based emergency response plans.

5.0 Drinking Water Quality Management Plan implementation

The DWQMP translates the structured framework of the DWQMS into practice by formalising its application across Council's daily operations. The Director of Cairns Infrastructure and Assets holds overall responsibility for implementation of the approved plan, supported by key operational staff and subject matter experts.

The plan involves partnership with our stakeholders and relevant agencies, by:

- Discerning the needs and expectations of our customers, stakeholders, regulators, and employees
- Forward planning appropriate solutions to maintain provision of safe water
- Responding to customer requests and monitoring network trends
- Combining robust water quality monitoring with effective internal and external reporting mechanisms to provide relevant and timely information
- Designing and adhering to contingency plans and water quality incident response arrangements
- Ensuring staff competence and enhancing knowledge through training in water quality obligations, treatment standards, and compliance procedures
- Openly communicating performance to build community awareness and confidence
- Auditing and reviewing practices against industry standards and stakeholder expectations to drive continual improvement

Customer Service Standards represent both a mandatory requirement for service providers and a key performance indicator for assessing water delivery levels of service. The Cairns Regional Council Customer Service Standards 2025-2030 were approved on 25 June 2025 as part of the statutory five yearly review cycle. The standards set performance expectations and empower customers to engage with Council to rectify any issues relating to service delivery. A copy of the standards is available on Council's website:

Customer Service Standards

Drinking water customer service performance data is compiled monthly and reported quarterly to Council. Data includes mains breaks, unplanned interruptions, response times, and water quality complaints as well as reportable drinking water non-compliances.

5.1 Staff competency

All staff new to the organisation undertake Council's Corporate Induction training which provides an overview of Council's responsibilities and commitments as a Water Service Provider. Ensuring individual and team roles and responsibilities align with the expectations of the DWQMP in the treatment, storage and distribution of water begins with recruiting employees who have the demonstrated capacity to fulfill the relevant position descriptions. Recognised as a critical element of maintaining supply of safe drinking water, Council also commits to ongoing drinking water quality awareness training for applicable staff, as outlined in a training schedule. During 2024-2025:

- Drinking Water Quality Management Systems (12 Elements) awareness training continued
- Drinking Water Quality Duty of Care training was internally delivered
- Drinking Water Quality Incident Management training was internally delivered
- Aqua Card online training was promoted and made available to all water employees. This course builds staff competency by providing an overview of drinking water quality and ensuring participants understand:
  - what contaminants are and the risks they pose to public health
  - how contaminants can enter a drinking water system
  - their responsibilities when working on or around drinking water infrastructure
  - safe work practices to reduce the risk of contamination

Wherever possible, Council staff also participate in industry training events and conferences, to maintain professional development and to network with contemporaries from across the water sector. Events attended in the 2024-2025 reporting period include:

- FNQROC Water Alliance quarterly meetings
- Australian Water Association - North Queensland Conference, 30 & 31 July 2024
- Qldwater Micro credentials course - Making use of water quality data, 6 August 2024
- Qldwater Micro credentials course - Operational implications of the DWQMP, 7 August 2024
- DLGWV Water Supply Regulation – Drinking Water Regulation Workshop, 1 April 2025
- Australian Water Association - Ozwater, 20 to 22 May 2025

5.2 Continuous improvement

Through the design of Council's DWQMS, opportunities for improving assets and operational practices are identified via audits, data reviews, incident investigations, research projects, and benchmarking against industry best practice. Improvement projects approved by Council's Management team are managed and monitored within a Risk Management Improvement Program (RMIP), an important tool for ensuring that DWQMP objectives are tracked and implemented. Items in the RMIP are prioritised according to risk, which informs planning for capital expenditure and operational works. Contingency funds are identified where a project is required to manage an unforeseen significant risk. Table 2 summarises the status of each RMIP item, including those projects implemented during the 2024-2025 financial year.

Table 2: RMIP status of implementation

Scheme	Reference	Core theme/ component	Improvement actions	Target date	Status/revised target date
Copperlode/Behana	Improve-0012	Security of the water supply system – Draper Road Water Treatment Plant (WTP)	Progress Cairns Water Security Stage 1 (CWSS1) Project	30/6/26	In progress. Construction works are over 50% complete
	Improve-0023	Security of the water supply system – Tunnel Hill Electrical & Communications	Condition assessment and masterplan to be undertaken to enhance the performance and reliability of the water treatment plant, ensuring the consistent delivery of safe and reliable water to the community	30/6/24	Complete 8/10/24
	Improve-0027	Treatment – Tunnel Hill WTP Filter Upgrades	Refurbishment program for the six direct filtration dual media filters at Freshwater WTP	30/6/25	Filters 1 – 4 complete. Filters 5 & 6 to be completed under separate program following completion of Draper Rd WTP
	Improve-0032	Water supply continuity - Asset condition	Treated water reservoir renewal program	31/12/25	In progress
		Water supply continuity - Asset condition	Treated water reservoir defects rectification – Brinsmead, Bayview and University Reservoir	30/6/26	In progress
	Improve-0033	Security of the Water Supply System – Crystal Cascades Water Intake	Upgrade of the Crystal Cascades water intake emergency generator	30/11/25	In progress. Target date updated to align with completion prior to next wet season
All	Improve-0022	Risk assessment procedure	Review and update the Drinking Water Quality Risk Assessment procedure including linkage between the Risk Register and RMIP	31/12/25	In progress. CIA risk registers have been aligned to increase accuracy of risk identification whilst reducing the number of risks and influencing the decision-making process
	Improve-0026	Cyber Security	Project to identify areas where security improvements are required in order to meet current industry standards, therefore preventing operational outages, data loss and regulatory non-compliance	25/6/28	In progress
	Improve-0029	Water Quality - Elevated disinfection by-product (chlorate) above Qld health guideline value (0.8mg/L)	Investigative monitoring into chlorate concentrations of treated water within the Copperlode/Behana network	1/3/26	Ongoing. Results to date are below guideline value
			Development of a chlorate action plan for consideration by CIA Management	31/8/24	Chlorate Risk Action Plan completed 12/02/25
			Investigative monitoring of chlorate concentrations within the rural treated water network	30/6/26	Ongoing. Currently sampling on a monthly basis subject to annual review

Scheme	Reference	Core theme/ component	Improvement actions	Target date	Status/revised target date
All	Improve-0030	Staff training & awareness	Review, update and enhance skills analysis for Water Services and Treatment personnel. Consider including a Verification of Competency (VoC)	31/12/25	Not started. Target date revised whilst recruitment for responsible officer is underway
			Undertake full training with all indoor and outdoor staff to ensure those newly appointed to roles are suitably briefed. Utilise internal training resources and Aquacard training	1/9/24	Complete
			Development of an online training package to be rolled out through the L&OD training platform for new employees and refresher training for identified staff	31/10/25	In progress. Target date revised to reflect resourcing for development of the new training platform
	Improve-0031	Operational and verification monitoring programs	Comprehensive review (through audit process) and optimisation of operational and verification monitoring programs to ensure currency and adequacy to manage supply quality risk	30/9/24	Complete
			Review and update the Laboratory Services Service Level Agreement (SLA)	31/11/24	Cancelled. The Laboratory Quality Management System Manual and the DWQMP include necessary detail that would otherwise be covered in a Service Level Agreement
	Improve-0034	Water quality data	Undertake review of water quality data (from source to supply) to inform risk assessment and identify trends	30/11/24	Complete
	Improve-0036	Asset condition monitoring	SCADA Upgrade and Improvement Program - Strategic asset planning for SCADA network assets not currently meeting industry standards and/or reaching end of life	15/6/26	In progress.
	Improve-0037	Documented procedures and system overview	Documentation identified as part of the DWQMP review requires updating to ensure relevance and currency - Review and identify any network changes required to be reflected in the Network Trunk Schematic and update using CAD	30/9/26	Minor changes to be marked in network schematic for the 2026 DWQMP review. Target date amended to align with substantive updates following commissioning of Draper Rd WTP

Scheme	Reference	Core theme/ component	Improvement actions	Target date	Status/revised target date
All rural schemes	Improve-0040	Water quality – emerging contaminants (PFAS)	Conduct a risk assessment of potential PFAS inputs to each catchment to identify possible sources, consider land use and historical activities that may present legacy risks, assess the likelihood and consequence of PFAS entering the raw water source, and highlight information gaps to determine if targeted monitoring is required. Incorporate the findings into the catchment characteristics section of the DWQMP	28/2/26	Not started
	Improve-0024	Security of the water supply system – Rural filter upgrade	Upgrade bag filters in the rural schemes to mechanically self-cleaning filters	TBA	Fishery Falls upgrade complete. Remaining schemes on hold pending outcomes of the rural water supply security strategy program (Improve-0025)
	Improve-0025	Security of the water supply system – Rural Water Supply Security Strategy Program	Planning study to review the rural water supply schemes to confirm existing source, treatment and network capability and constraints under normal and extreme climate conditions. Deliverables include development of an Emergency Water Supply Plan and Options Assessment	30/3/26	In progress with revised target date
	Improve-0028	Discrepancies between SCADA and system performance	Rollout the tested UV programming changes to all gravity fed rural sites following learnings from 2024 UV outage events	16/6/25	Complete
			Scope submission for 2025/26 budget consideration of a consultancy to review the functional descriptions of each site against the plant operations, to provide strategic recommendations across all rural WTPs	22/3/25	Complete. Outcomes to be tracked via Improve-0035
	Improve-0035	Knowledge and documentation for water supply system	Development of SCADA functional descriptions for all rural water treatment sites	1/3/25	Complete
			Develop site plans for rural WTP sites to support the functional descriptions	31/12/25	In progress. Target date extended due to limited internal resources
Orchid Valley	Improve-0039	Treatment – iron related bacteria contributing to elevated turbidity, colour and metals	Orchid Valley Water Treatment Investigation and Concept Design consultancy	28/2/25	Complete
			Review risk assessment based on findings of Orchid Valley investigation consultancy	28/2/25	Complete

5.3 Infrastructure projects

In addition to the RMIP, Council demonstrates its commitment to providing safe, reliable drinking water through the delivery of capital projects. Works undertaken on water infrastructure and the amount spent for the 2024-2025 financial year included:

- Cairns Water Security stage 1 construction $125,217,456
- Smart Water Meter Project phase 2 $4,356,474
- 2024/25 Water main refurbishment program $3,559,012
- 2024/25 Water meter replacement program $2,634,267
- Mayers St Reservoir refurbishment $1,877,601
- Brinsmead Reservoir renewal $1,844,914
- Mount Peter Estate stage 9 & 10 - trunk water mains $1,573,142
- Freshwater Creek WTP sodium hypochlorite system upgrade $1,408,855
- 2024/25 - 2026/27 New revenue water meter installations $1,382,545
- Mount Peter High Level Reservoir stage 1 $1,279,716
- Bayview Large Reservoir refurbishment $1,073,409
- Copperlode Falls Dam safety upgrade $688,614
- Mount Peter Reservoir stage 2 $590,252
- Panguna Reservoir refurbishment $538,286
- 2024/25 Replacement of commercial water meters $462,264
- Freshwater WTP filter upgrade $330,330
- Laboratory Services ICPMS equipment $310,300
- SCADA Upgrade and Improvement Program $242,980
- Goldsborough Water Pump Station upgrade $209,703
- Ferntree and Lake Morris catchments water supply upgrade $189,672
- Dempsey St A & B Reservoir refurbishments $171,163
- 2023/24 New revenue water meter installations $152,360
- Communications upgrade Crystal Cascades intake to Copperlode Falls Dam and Freshwater WTP $127,282
- Freshwater WTP trunk valve building renewal & chlorine analyser $109,933
- Kamerunga Bridge water main rectification works $85,343
- Tunnel Hill Clearwater Reservoir remediation $75,887
- Laboratory Services deionised water system $72,841
- Chatham Terrace Water Pump Station renewal $66,680
- Orchid Valley treatment review & upgrade $65,895
- Discovery Drive Water Pump Station upgrade $63,385
- Bellenden Ker water intake structure repairs $57,422
- City View Water Pump Station renewal $50,633
- Freshwater WTP wash water and sludge handling upgrade $49,588
- Ponticello Water Pump Station renewal $49,164
- 2023/24 Replacement of commercial water meters $47,888
- 2024/25 Purchase metered standpipes $44,373
- Dexter Road water main extension $30,200
- Trunk reservoir and major intake access condition assessment $27,964
- Installation of safety rails Bellenden Ker & Fishery Falls $27,306
- Barron View Reservoir refurbishment $27,258
- Giacomi Access water main extension $27,122
- Bartle Frere Reservoir refurbishment $26,431
- Sodium hypochlorite upgrades – package 2 $22,790
- Trinity Beach booster pump system $21,127
- 2023/24 Water main refurbishment $20,526
- Paradise Palms to Clifton Village Shopping Centre new water main $20,144
- Crystal Cascades control valve bypass $19,447
- Mountain View B Reservoir renewal $18,114
- Copperlode Dam safe access design & construct $18,015
- Crystal Cascades supply resilience upgrade $17,834
- Freshwater WTP raw water upgrade $14,971
- Freshwater WTP electrical condition assessment and masterplan $14,858
- Crystal Cascades water intake access road remediation post Cyclone Jasper $14,464
- Centenary High Reservoir refurbishment $13,427
- Bramston Beach emergency water supply $13,240
- Crystal Cascades generator upgrade $12,647
- SCADA 4G Emergency roll out of routers $11,866
- Palm Cove Reservoir refurbishment $8,940
- Freshwater WTP Clearwater Reservoir outlet valve and flowmeter replacement $8,248
- Freshwater WTP electrical upgrades $7,795
- PRV protection - Whyambeel Chase, Smithfield $7,590
- Tobias Close A & B Reservoir refurbishment $5,904
- Freshwater WTP service water system refurbishment $4,593
- Emergency Water Supply Plan $4,277
- Crystal Cascades raw water control valve replacement $2,687
- Bessie Point construction of inlet and outlet mains $1,433
- Copperlode Falls Dam outlet conduit floatation prevention upgrade $1,221
- Freshwater Creek emergency pumped supply $1,058

5.4 Audit findings

Pursuant to section 108 of the *Water Supply (Safety & Reliability) Act 2008* ("the Act"), audits of the DWQMP must be conducted by an external party with relevant qualifications, at a frequency determined by the regulator. Council was required to complete an audit of the DWQMP by 30 June 2025, which was carried out from 3 - 5 March 2025. Overall, the audit found that Council was compliant with all eleven auditable elements.

The audit concluded that:

- The monitoring and performance data provided to the regulator under the plan was accurate; and
- Council is compliant with their DWQMP; and
- The plan maintained relevance to the drinking water service provided by Council.

No non-conformities with the Act and Water Supply (Safety and Reliability) Regulation 2021 were noted during the audit. A number of opportunities for improvement (OFIs) were identified, being items which may help improve efficiency, reliability or reduce the risk of future non-compliances.

Following the audit findings, a workshop was held with members of Council's Drinking Water Quality Coordination Team to determine how the OFIs should be addressed, agree on relevant recommendations, and document the resulting actions. The status of the OFIs as of October 2025 are summarised as follows:

- One OFI was considered, with no further actions required at this time
- Eight OFIs were assigned actions deemed appropriate to address the audit recommendations, which are being tracked in the Actions and Improvements Register
- One OFI has been actioned and finalised

5.5 Review Outcomes

No DWQMP review was required or conducted during the 2024/2025 financial year.

The DLGWV approved Council's amended plan through the issuing of an Information Notice on 15 August 2024. Under the approval, Council is required to review the plan by 31 March 2026 and every two years thereafter. Council will initiate the review process in late 2025, continuing into the new year, to ensure the DWQMP is amended where necessary to maintain its effectiveness.

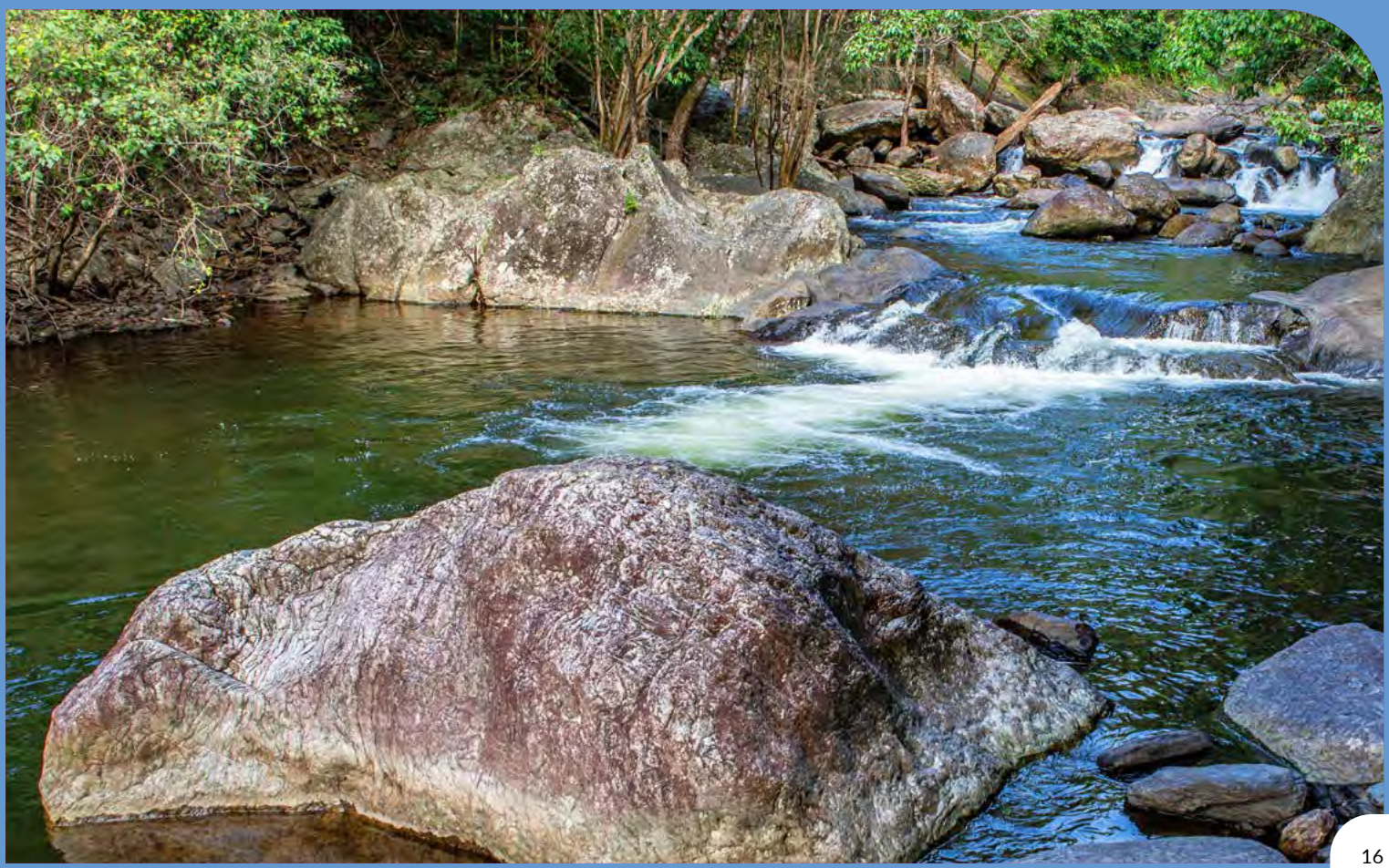
6.0 Water quality monitoring

6.1 Source water

An effective DWQMS begins with understanding the hazards linked to the natural water sources that supply drinking water. Council manages this through an extensive monitoring program that supports both quantitative and qualitative risk assessments within the catchments, to determine appropriate treatment requirements. A general summary of Council's source water monitoring program is provided as Table 3. Results for the reporting period are summarised by scheme in Appendix A.

Table 3: General Summary of the Source Water Monitoring Program

Scheme		Parameter Monitored	Frequency of Monitoring
Babinda, Bartle Frere, Bellenden Ker, Bramston Beach, Fishery Falls, Mirriwinni, Mountain View, Orchid Valley		*E. coli*, *Cryptosporidium*, *Giardia* Temperature, Turbidity	Monthly
		Iron, Manganese, Silicon, Calcium, Magnesium, Potassium, Sodium, Total hardness Total dissolved salts, Colour, Electrical conductance, pH, Total alkalinity Sulphate, Chloride, Fluoride	Quarterly
Copperlode/ Behana	Behana Creek Intake	*Cryptosporidium*, *Giardia*, Turbidity	Weekly
		E. coli and total coliforms	Fortnightly
		Aluminium (total & dissolved), Blue-green algae, Calcium, Colour, Dissolved organic carbon Iron (total & dissolved), Magnesium, Manganese (total & dissolved), pH Total alkalinity, Total hardness, Total nitrogen, Total organic carbon, Total oxidised nitrogen	Monthly
	Freshwater Creek Intake	Colour, *E. coli* and total coliforms, Electrical conductance, Heterotrophic plate count Iron, Manganese, pH, Turbidity	Weekly
		Dissolved oxygen, Temperature, Sulphide	Monthly
		Alkalinity, Ammonia, Blue-green algae, Chlorophyll a, Ortho phosphate Total oxidised nitrogen, Total nitrogen, Total phosphorous, Thermotolerant coliforms	Quarterly
		Arsenic, Calcium, Chloride, Magnesium, Organophosphate pesticides, Potassium Silicon, Sodium, Sulphate, Tin, Total dissolved salts, Total hardness	Six monthly**



6.2 Treated water

Council applies a multi-barrier treatment approach across all water supply schemes to ensure the safety and reliability of drinking water. Depending on the characteristics of each scheme, this may include catchment protection, particle filtration, media filtration, ultraviolet disinfection, and chlorine disinfection.

Treated water is subject to a comprehensive monitoring program targeting substances that could pose a risk to public health or affect water quality, as identified through a risk management approach. The Verification Monitoring Program (VMP) confirms that treatment barriers and preventive measures are working effectively, ensuring that safe drinking water, compliant with ADWG water quality criteria, is delivered to Council's customers.

Operational monitoring, undertaken in both real time through SCADA and during site visits and/or field testing, supports the broader verification monitoring program. It provides early warning when conditions fall outside normal operating parameters, enabling operators to take timely corrective action to ensure that treatment barriers and control measures continue to perform effectively.

Alongside health-based checks, the VMP also considers non-health-related factors that can influence water's taste, smell, and appearance. These "aesthetic" guideline values serve as quality indicators, helping Council identify opportunities for improvement. Monitored parameter trends are tracked against both the health related and the aesthetic limits set by the ADWG, as well as Council specific trends.

The VMP is conducted by NATA accredited staff from Cairns Regional Council Laboratory Services. A general summary of the monitoring schedule is provided as Table 4.

Table 4: General Summary of Verification Monitoring Program

System Component	Parameter Monitored	Frequency of Monitoring
Reticulation network	Alkalinity*, Chlorine (free & total), Colour, *E. coli* and total coliforms Electrical Conductivity*, Heterotrophic plate count, pH, Temperature, Turbidity	Weekly
	Aluminium, Chlorate*, Copper, Iron, Lead, Manganese	Monthly
Reservoirs	Alkalinity, Chlorine (free & total), *E. coli* and total coliforms Heterotrophic plate count, pH, Temperature, Colour**, Turbidity**, Aluminium** Copper**, Iron**, Manganese**	Weekly
	Chlorite, *Naegleria*, Total Trihalomethanes	Monthly*
	Ammonia, Nitrate, Nitrite, Chloride, Sodium, Total dissolved solids Sulphate, Zinc, Total Trihalomethanes	Six monthly**

* at selected sites
**at Clearwater Reservoir

7.0 Compliance with Water Quality Criteria

This section provides an overview of Council's drinking water quality performance for the 2024-2025 reporting period. Appendix B presents statistical results for each scheme, the number of samples collected compared with DWQMP requirements, and the relevant ADWG health and aesthetic values.

Council has Business Continuity Plans to ensure essential services and sufficient monitoring can be maintained during periods of interruption. While every effort is made to adhere to the VMP, occasional circumstances may prevent collection of a sample. In such cases, a "no-sample" is reported by the Laboratory. If a reduced VMP is required, Council ensures there are sufficient monitoring points within the catchment to protect public health and to meet regulatory requirements. Where significant changes to the VMP occur, or statutory minimum requirements may be at risk, Council is required to consult with the regulators to establish an acceptable short-term solution.

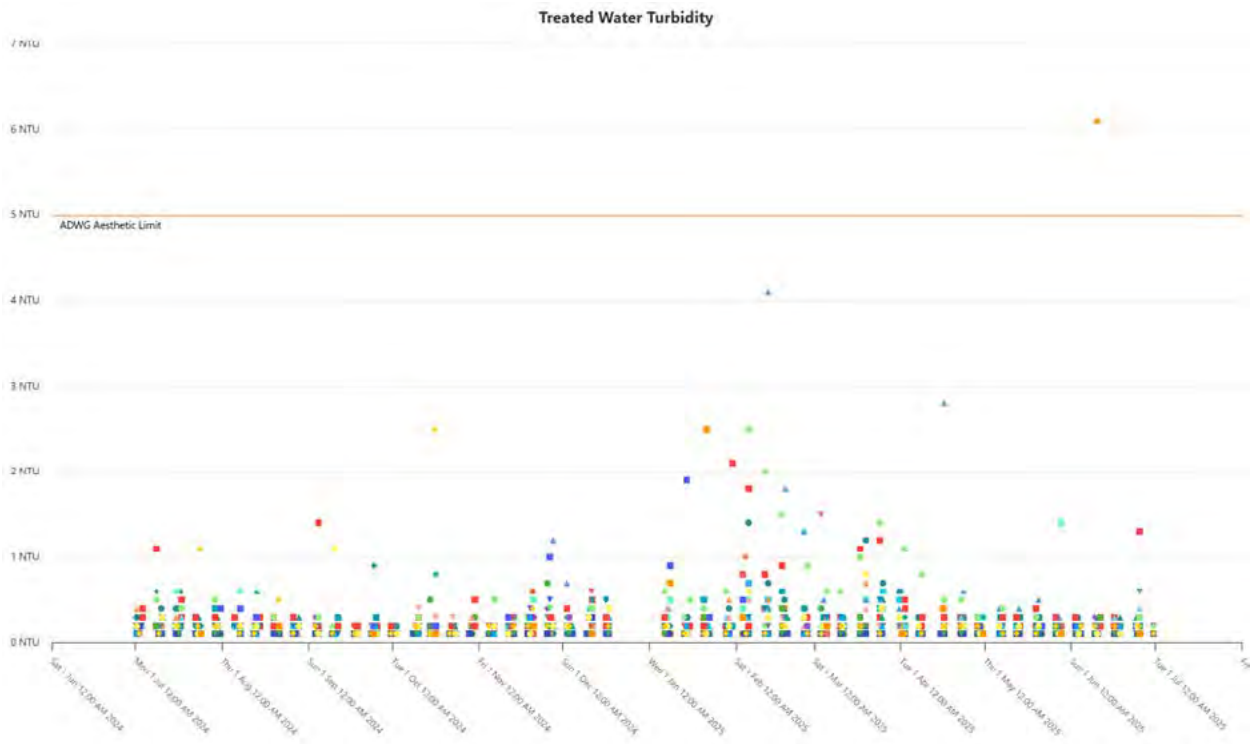
Differences between the number of samples required and those actually collected during the reporting year arose from a combination of factors. These included limited access to some sites due to adverse weather and safety considerations, reservoirs being offline with no flow available for sampling and a reduced sampling program over the Christmas shutdown period. The reduction in sampling over the shutdown period was prearranged with the regulator, and all schemes continued to receive sufficient coverage, with microbial and disinfection residual monitoring maintained throughout.

During the reporting year, Council notified the regulator of ten incidents in accordance with legislative requirements. Of these, seven were classified as events with no associated non-compliance against a water quality criterion, while the remaining three were related to detections or exceedances of ADWG or Qld Health guideline limits. Overall, chemical compliance was achieved across all except one scheme, which exceeded the guideline limit for chlorate.

In each instance where a health guideline value was not met, the regulator was notified, and an investigation undertaken in line with legislative requirements. The outcomes of these investigations, along with corrective actions, are detailed in the following section Notices of Non-Compliance with Water Quality Criteria.

Figures 2 - 9 illustrate Council-wide water quality performance trends for the reporting period and provide an overview of the drinking water supplied compared with ADWG guideline values. Microbial compliance results are detailed in the following section.

Figure 2: Treated Water Turbidity



Turbidity is a measure of the light scattering property of water caused by the presence of fine suspended matter. Maintaining low turbidity is crucial because elevated levels of particles can shield microorganisms from disinfection. Ideally, drinking water should exhibit turbidity measuring below 1 Nephelometric Turbidity Units (NTU). The ADWG has established an aesthetic guideline, advising a maximum turbidity level of 5 NTU. No specific health-related threshold has been defined. In the 2024-2025 reporting period, there was a single exceedance of the aesthetic limit recorded. The affected site and adjacent hydrants were flushed, and subsequent tests returned results below the ADWG limit.

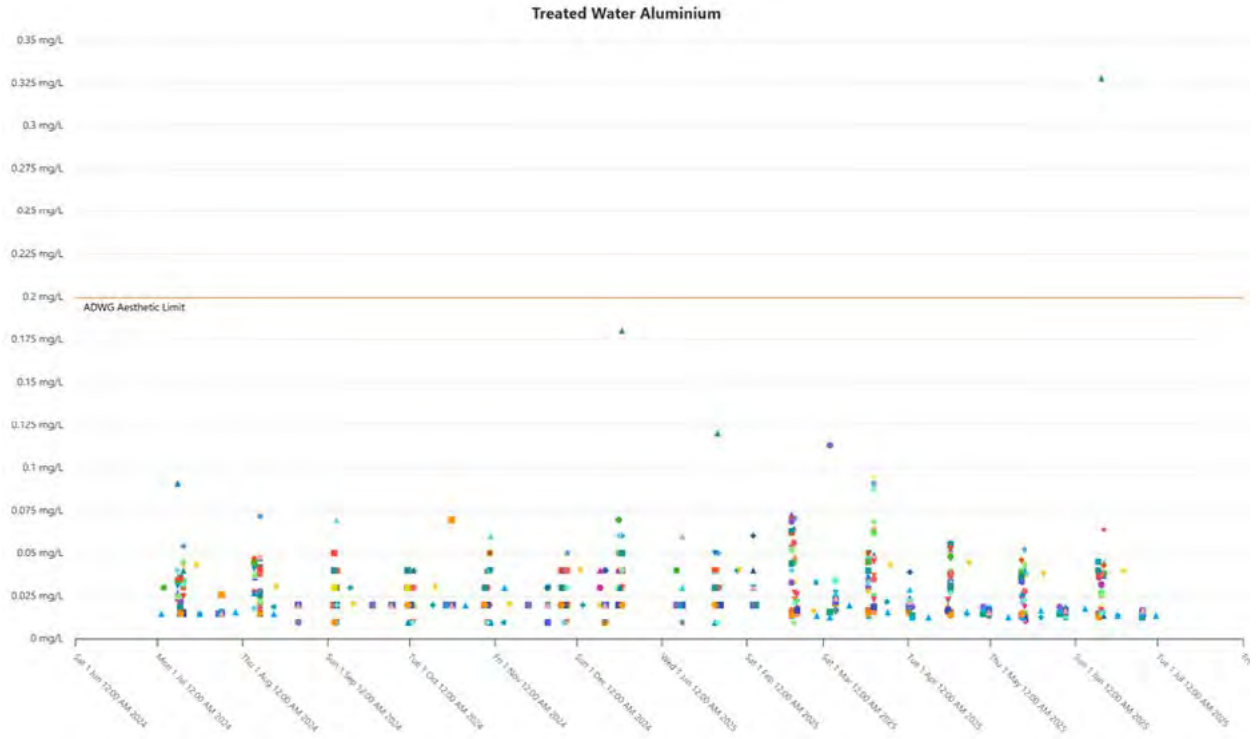
Figure 3: Treated Water pH

The ADWG specify an aesthetic pH range of 6.5 to 8.5. While most test results fall within this range, occasional deviations do occur, as shown in Figure 3. Although there is no health-based guideline value for pH, the ADWG notes that values below 6.5 or above 11 may contribute to corrosion of plumbing fittings and pipes. Instances where pH exceeds the 8.5 aesthetic limit are likely due to interactions between the water and cement-lined pipes within the distribution network. Elevated pH levels can also reduce the effectiveness of chlorine disinfection. To mitigate this risk, Council closely monitors disinfection performance by regularly testing microbial indicators to ensure water quality is maintained.

Figure 4: Treated Water Total Chlorine

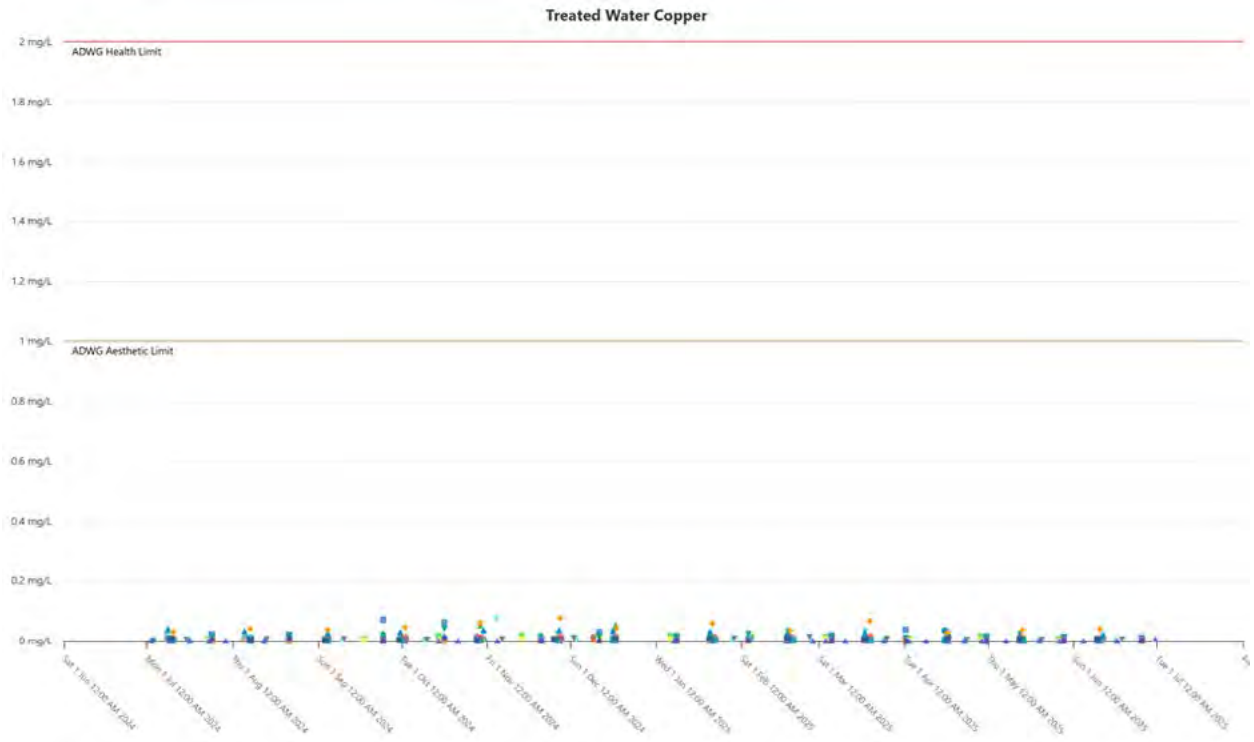
Chlorine in the form of sodium hypochlorite is added to the water supply as part of the treatment process. This occurs both at water treatment plants and at select re-chlorination reservoirs. Chlorine is a common drinking water disinfectant used for pathogen control and it is important to maintain a chlorine residual throughout the distribution network. Based on health considerations, the ADWG specifies a guideline value of maximum 5 mg/L for total chlorine. During the 2024-2025 reporting period, there were no exceedances of the ADWG health limit.

Figure 5: Treated Water Aluminium



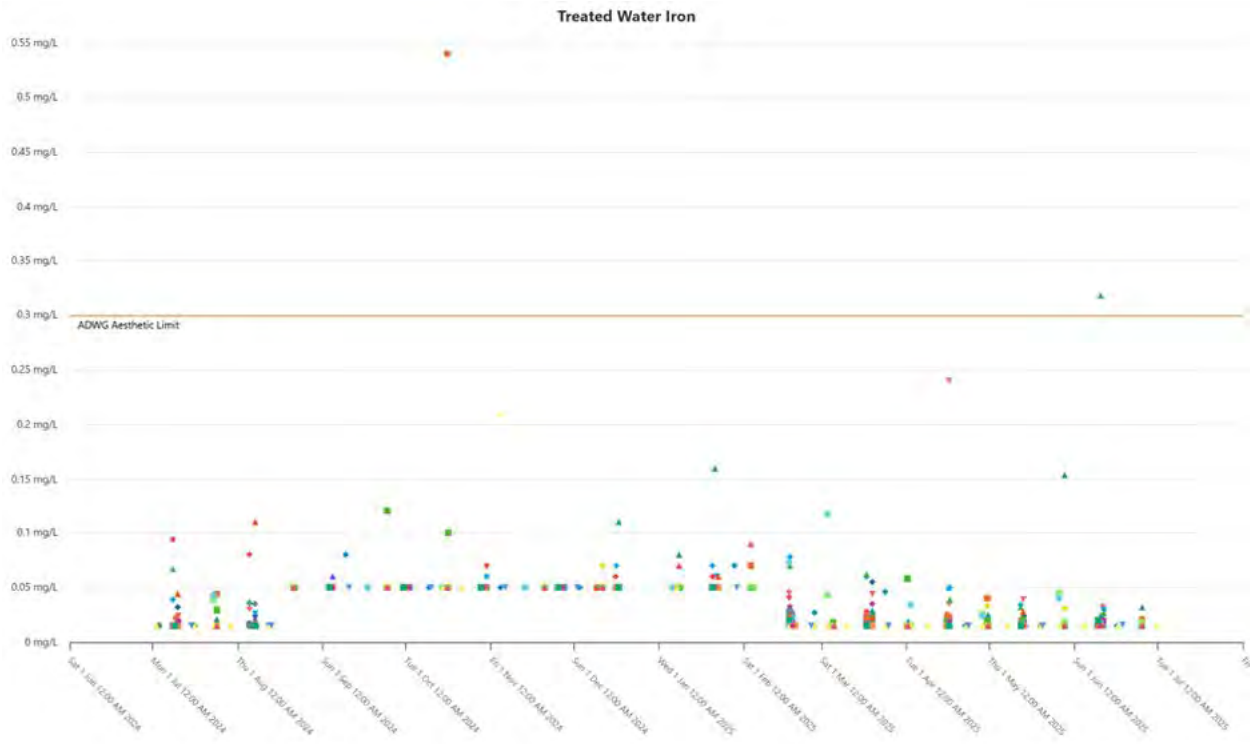
The ADWG has set a limit for aluminium in drinking water based on aesthetic considerations, stating that it should not exceed 0.2 mg/L. There was a single exceedance of the guideline limit during the reporting period, which occurred in the Copperlode/Behana scheme. The affected site and adjacent hydrants were flushed, and subsequent tests have returned results below the ADWG limit.

Figure 6: Treated Water Copper



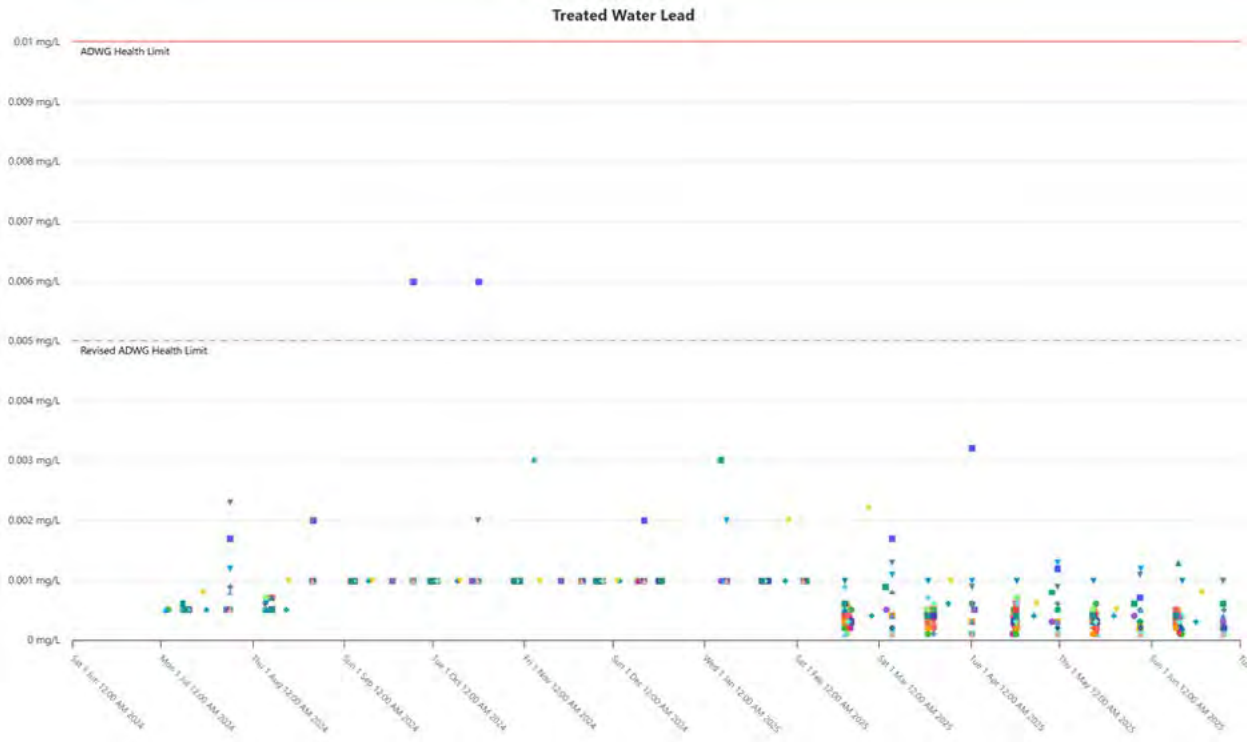
The ADWG has established a health limit of 2 mg/L and an aesthetic limit of 1 mg/L for copper in drinking water. Excessive copper levels can pose health risks, particularly impacting the gastrointestinal system. Additionally, high copper concentrations can affect the aesthetic qualities of water, leading to undesirable taste and discoloration. All drinking water supplied by Council during the reporting period remained well below the guideline values.

Figure 7: Treated Water Iron



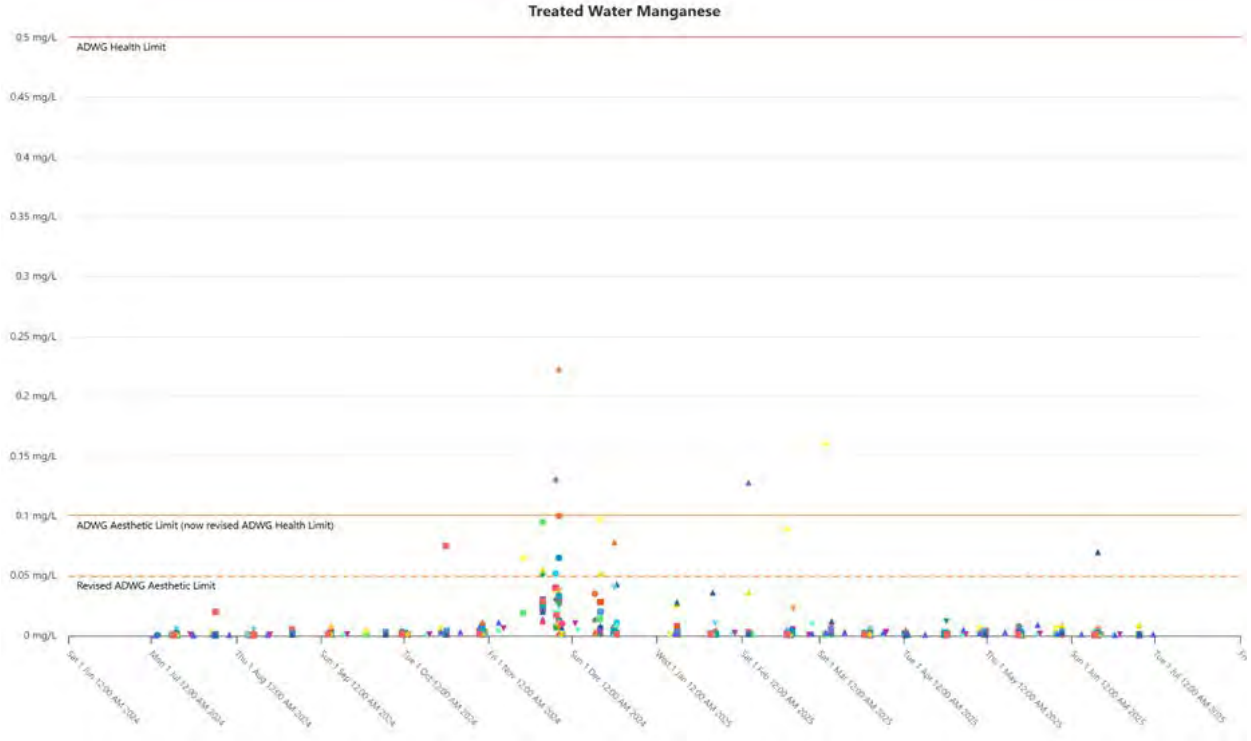
Excess iron in drinking water supplies is associated with aesthetic issues, including discolouration and undesirable taste. The ADWG prescribes an aesthetic guideline value of 0.3 mg/L. Consistent with ADWG guidance on data presentation, results are rounded to a single significant figure. Applying this approach, one exceedance of the guideline value was recorded during the 2024–2025 reporting year. Additional details of this event are presented in Appendix B under the Copperlode/Behana scheme.

Figure 8: Treated Water Lead



During the 2024–2025 reporting period, no exceedances were recorded of the 0.01 mg/L ADWG health guideline value for lead applicable at that time. Effective June 2025, the ADWG has revised this health guideline limit to 0.005 mg/L.

Figure 9: Treated Water Manganese



Manganese levels greater than the aesthetic guideline limit can affect the taste of water and stain plumbing fixtures. During the 2024-2025 reporting period, there were four isolated exceedances of the aesthetic guideline recorded, based on the guideline limits in place at that time; these are detailed in Appendix B under the Copperlode/Behana scheme. A cluster of elevated results was also observed in November–December 2024, linked to critical reservoirs being offline during a period of high demand. As of June 2025, the ADWG has revised the health guideline to 0.1 mg/L and the aesthetic guideline to 0.05 mg/L.

7.1 Microbiological performance

E. coli is used as a sanitary quality marker, as its presence indicates a greater risk that faecal related microbial pathogens are present. Most strains of *E. coli* are harmless and are found in great quantities in the intestines of humans and warm-blooded animals; certain strains however may cause illness (World Health Organization, 2018). The Queensland drinking water standard (*Public Health Regulation 2018*, s52) requires that a minimum of 98% of samples collected over a 12-month period detect no *E. coli*.

Council achieved full compliance with the Regulation across all schemes during the reporting year. A single *E. coli* detection was recorded in the Copperlode/Behana scheme, detailed further in the *Notices of Non-Compliance with Water Quality Criteria* section. Due to the high number of samples collected, all schemes remained at 100% overall compliance. A summary of *E. coli* results for each drinking water supply scheme is provided as Table 5, with monthly performance details for each scheme included in Appendix C.

Table 5: *E. coli* Performance Assessment

Scheme	No. samples required per year as per Public Health Regulation 2018	No. of samples collected in previous 12 months	% of samples that meet health guideline values
Copperlode/Behana	396	2096	100%
Bartle Frere	12	105	100%
Babinda	52	103	100%
Bellenden Ker	12	53	100%
Bramston Beach	12	52	100%
Fishery Falls	12	52	100%
Mirriwinni	12	52	100%
Mountain View	12	53	100%
Orchid Valley	12	53	100%

Data sourced from CRC Laboratory database via SWIMlocal.

8.0 Notices on non-compliance with water quality criteria

Under sections 102 and 102A of the *Water Supply (Safety and Reliability) Act 2008*, immediate notification to the regulator must occur under each of the following scenarios:

- The quality of water supplied does not comply with the water quality health criteria as specified in the ADWG
- The conditions of our approved DWQMP are not met, including defined Critical Control Points
- Council becomes aware of an incident as otherwise prescribed under legislation

Council made ten notifications to DLGWV during the reporting period, the details of each are summarised below.

Scheme	Babinda
Parameter/Issue	UV system outage
Incident date	6 September 2024
Event description	During a planned mains power outage, a faulty temperature sensor caused the standby generator to shut down unexpectedly. As a result, the treatment plant operated without UV disinfection for 46 minutes. Filtration and chlorination processes remained fully operational throughout the incident.
Corrective and preventative actions	Operators promptly attended the site and manually closed the inlet valve to prevent further flow of partially treated water. Contractors were engaged to investigate the fault and restore the generator to operational condition. The generator is part of an ongoing planned maintenance program and had been tested immediately prior to the scheduled shutdown, with no issues detected. The faulty temperature sensor, which caused the standby generator to shut down, was replaced. Follow-up sampling within the reticulation network confirmed that chlorine residuals were maintained. Once mains power was restored, the treatment plant resumed normal operation.

Scheme	Fishery Falls
Parameter/Issue	UV system outage
Incident date	29 October 2024
Event description	A programming error at Fishery Falls WTP resulted in the inlet valve remaining open during a UV system failure, rather than closing as intended. This allowed the plant to operate without UV disinfection for 47 minutes.
Corrective and preventative actions	Operators responded by performing a remote shutdown of the plant to isolate treatment. SCADA and electrical teams investigated the fault and identified a programming error. In consultation with the regulators, a Boil Water Advisory (BWA) was issued to residents in the affected scheme. Technical officers implemented and tested programming changes, which were finalised on 30 October. Following laboratory results, reservoir turnover, and SCADA trends which demonstrated a return to normal operation, the BWA was lifted on 6 December. A new RMIP item was created to oversee the implementation of programming changes across other rural treatment plants to prevent recurrence, which has been completed.

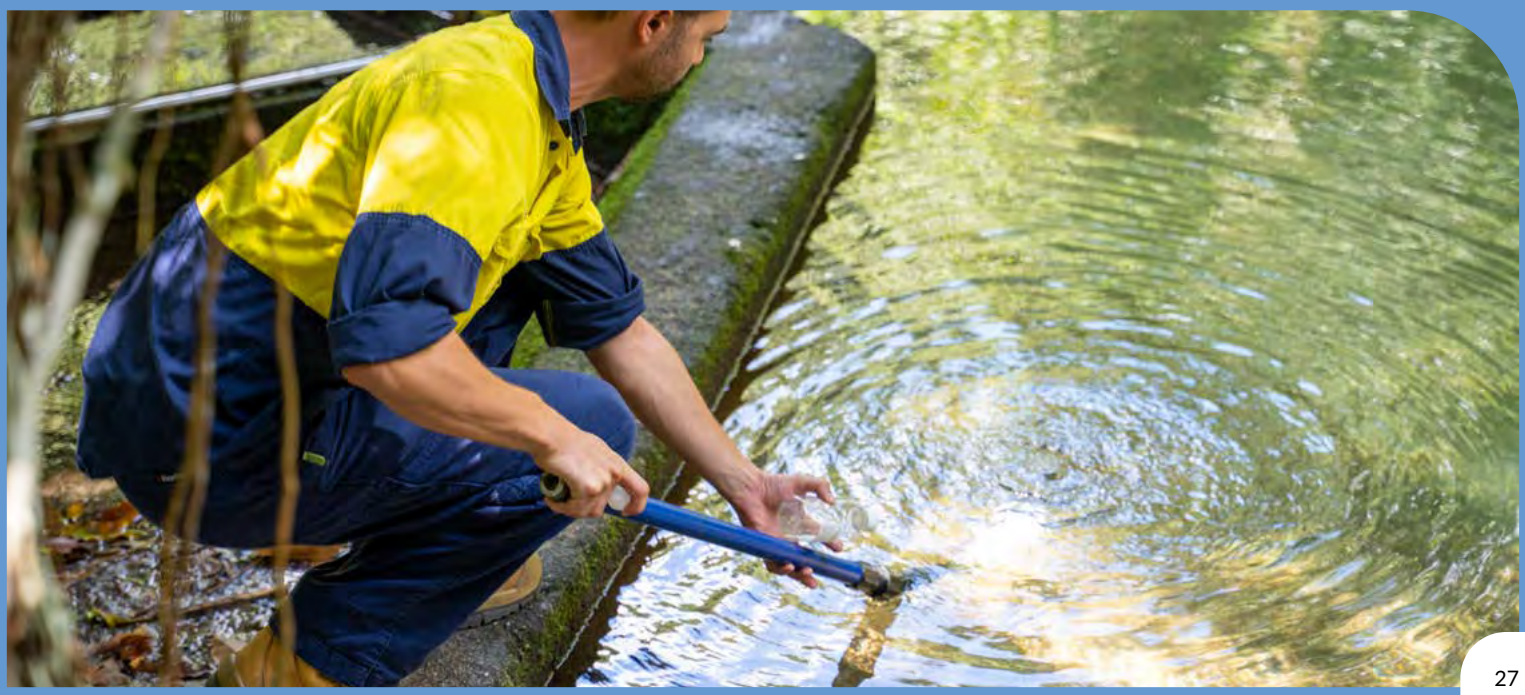
Scheme	Bartle Frere
Parameter/Issue	Power outage
Incident date	7 November 2024
Incident description	During an unplanned power outage at Bartle Frere WTP, the standby generator failed to start, resulting in the plant operating without UV or chlorination for 64 minutes. Operators were unable to perform a remote shutdown due to the outage, and manually attended the site to isolate the plant.
Corrective and preventative actions	The standby generator was successfully started in manual mode, and mains power, along with all treatment barriers, was restored shortly thereafter. In consultation with regulators, a BWA was issued for residents in the affected scheme. The BWA was subsequently lifted following receipt of compliant laboratory results, along with SCADA trends and flow data demonstrating that the risk to public health had been mitigated. Contractors were engaged to investigate the cause of the generator failure, noting that all preventative maintenance and routine testing had been performed as scheduled, with no issues identified. While the fault could not be replicated during testing, no further issues have been detected.
Scheme	Copperlode/Behana
Parameter/Issue	Brinsmead Reservoir remediation & commissioning
Incident date	22 November 2024
Incident description	On 22 November 2024, Brinsmead Reservoir was recommissioned following planned remediation works by an external contractor. Shortly after returning to service, customers within the catchment area began reporting taste and odour issues, which were described as chemical in nature. In response to the complaints, the reservoir was taken offline on 25 November and has remained offline while investigations and rectification works are ongoing
Corrective and preventative actions	Initial flushing of the system was undertaken to address the immediate taste and odour concerns. Additional laboratory testing was carried out to assess potential contaminants, supported by an analysis of rainfall records, customer complaint trends, product specifications, and application methods. Several oversights in the commissioning process were identified, including: • Use of a non-compliant product to seal the reservoir roof, with potential for ingress • Overspray of the polyurea lining during application • Sludge residuals, possibly caused by insufficient flushing of the inlet and outlet pipework prior to recommissioning Rectification works are ongoing, with the DLGWV being provided regular updates throughout the process. Plans for reinstatement of the reservoir will be undertaken in consultation with the regulator to ensure appropriate risk mitigation before the site is returned to service. Lessons from the incident are being incorporated into commissioning procedures to strengthen quality assurance and product compliance checks for future projects.
Scheme	Bramston Beach
Parameter/Issue	UV system outage
Incident date	25 November 2024
Incident description	During routine remote monitoring, an on-call officer was alerted to a UV system outage at Bramston Beach and observed that the inlet valve had not closed as intended. As a result, partially treated water entered the reservoir between 6:12 pm and 7:40 pm.
Corrective and preventative actions	The on-call officer performed a remote isolation of the reservoir to prevent further inflow of partially treated water. In consultation with the regulators, a BWA was issued that same evening. SCADA and electrical teams investigated and determined that the UV system had shut down as intended due to the detection of low flows, but a coding error prevented the inlet valve from closing as it should have upon the UV shutdown. Programming changes to correct the error were implemented and tested by 28 November. These formed part of a broader RMIP item, now completed, which rolled out programming changes across other rural treatment sites to prevent recurrence. The BWA was lifted on 5 December following receipt of compliant laboratory results, SCADA trends, and evidence of reservoir turnover.

Scheme	Bartle Frere
Parameter/Issue	UV system outage
Incident date	10 December 2024
Incident description	On 11 December, a blown fuse caused a local power loss to the UV system, resulting in its shutdown. During the 44-minute outage, partially treated water entered the reservoir. The outage was identified at 6:09 pm when the on-call officer received a paged alarm. Treatment was isolated remotely at 6:44 pm through the closure of the inlet valve. In consultation with the regulators, a BWA was issued for residents of the affected scheme that evening.
Corrective and preventative actions	Council's electrical team coordinated the replacement of the fuse, while SCADA technical officers updated the coding to ensure the inlet valve would close in the event of a UV shutdown. The system underwent testing of both new and existing programming, with confirmation on 13 December that the site was operating correctly. Laboratory results, SCADA trends, and operational monitoring data were submitted to the regulators on 19 December, leading to the lifting of the BWA. Programming changes addressing the scenarios identified in recent UV outage events have been implemented across relevant rural sites. These actions are tracked under RMIP item Improve-0028 to ensure consistent risk management and prevent recurrence.

Scheme	Bartle Frere
Parameter/Issue	Partial treatment bypass due to low supply
Incident date	29 January 2025
Event description	High raw water turbidity associated with monsoonal rainfall, combined with increased water demand, resulted in the depletion of the Bartle Frere treated water reservoir to critical levels. To maintain supply during the ongoing weather event, a BWA was issued, allowing for the partial bypass of the treatment process to replenish storage levels.
Corrective and preventative actions	Following the issuing of a BWA for customers in the affected scheme, the 50 and 1 micron bag filters were bypassed on the afternoon of 29 January. Both UV treatment and chlorination remained operational during the bypass event. All treatment barriers were reinstated on 12 February, however due to resourcing constraints in the aftermath of the significant rainfall event, the advisory remained in place until 21 February when laboratory testing, operational monitoring and SCADA data were reviewed to confirm a return to normal operation. Council is currently undertaking a planning study (RMIP item *Improve-0024*) to review the rural water supply schemes, assessing source, treatment, and network capabilities under both normal and extreme climate conditions. Deliverables include the development of an emergency water supply plan and options assessment. The study will inform decisions regarding potential implementation of alternative filtration arrangements for this and other rural schemes, similar to those at Fishery Falls.

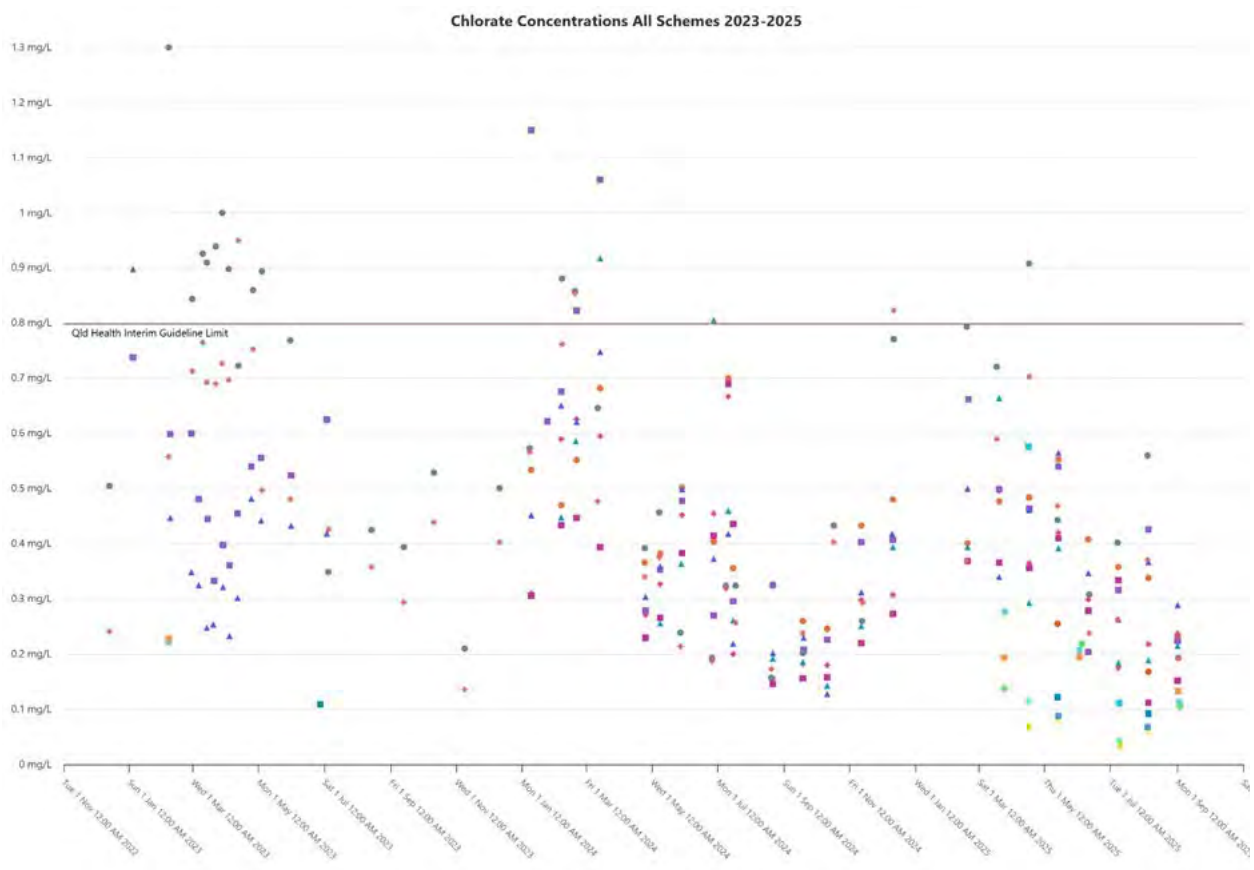
Scheme	Copperlode/Behana
Parameter/Issue	*E. coli* detection
Incident date	3 February 2025
Incident description	On 3 February 2025, a routine verification monitoring sample collected from Machans Beach detected an estimated 2 CFU/100 mL of *E. coli*. The laboratory issued an exceedance notification, and the regulator was promptly informed.
Corrective and preventative actions	Investigations confirmed that all other operational and verification monitoring results were within specifications before and during the detection. Disinfection and chlorine residuals were maintained throughout the period, and verification monitoring at adjacent sites remained within ADWG limits. A resample collected on 4 February returned a result of <1 CFU/100 mL, below ADWG limits. The initial detection is understood to have resulted from contamination during sampling, influenced by overhanging vegetation, heavy rainfall and high wind conditions. Risk of sample contamination is managed through the Laboratory's NATA accreditation, which includes continual review of the sampling procedure. It was found that procedures were correctly followed, with all practicable measures taken to prevent contamination. Scheduling requirements for verification monitoring necessitate samples be collected during inclement weather.

Scheme	Bartle Frere
Parameter/Issue	Power outage
Incident date	15 March 2025
Incident description	The Bartle Frere scheme was impacted by an unplanned power outage on Saturday 15 March, at which time the backup generator failed to start as intended. This resulted in the plant operating without UV treatment for approximately 1 hour and 50 minutes. Chlorine residual was maintained during the event and bag filters remained in place.
Corrective and preventative actions	Council's electrical team attended site and manually reinstated the generator, restoring full treatment at approximately 3:15pm. Investigations identified an issue with the phase failure sensor, which did not operate as intended to start the generator automatically during the mains power outage. A new relay was installed to remove reliance on the phase failure sensor, which was successfully tested under multiple power outage scenarios. In consultation with the regulators, and considering the maintained chlorine residual, the operational bag filters and the protected nature of the catchment, precautionary messaging rather than a BWA was issued to customers within the affected scheme, advising them to seek medical attention if they felt unwell. The backup generator remains under a planned maintenance program, and operators continue to conduct monthly checks to provide assurance of reliability during future power outages.
Scheme	Mountain View
Parameter/Issue	Chlorate
Incident date	16 April 2025
Event description	Ongoing monthly sampling to investigate chlorate concentrations returned a result of 0.908mg/L in the Mountain View scheme, exceeding the Qld Health interim guideline limit of 0.8mg/L.
Corrective and preventative actions	The onsite sodium hypochlorite storage tank was emptied, cleaned, and refilled with fresh solution. Follow-up sampling conducted on 12 May returned a chlorate concentration of 0.443 mg/L, and subsequent results have remained below the interim guideline limit. Investigative monitoring is ongoing. Additionally, whilst the Rural Water Security Strategy which may identify infrastructure solutions is finalised, Council has implemented an interim management process for the rural water supply schemes. Measures include: • In-house management of chlorine deliveries to rural sites, and maintenance of onsite chemical storage to increase turnover and minimise storage times • Development of a standard operating procedure for managing sodium hypochlorite storages at rural sites, including scheduling routine tank cleaning • Development of a chlorate risk action plan to guide proactive management efforts The success of management actions to date is apparent in Figure 10.



Scheme	Mountain View
Parameter/Issue	Chlorate
Incident date	16 April 2025
Event description	Ongoing monthly sampling to investigate chlorate concentrations returned a result of 0.908mg/L in the Mountain View scheme, exceeding the Qld Health interim guideline limit of 0.8mg/L.
Corrective and preventative actions	The onsite sodium hypochlorite storage tank was emptied, cleaned, and refilled with fresh solution. Follow-up sampling conducted on 12 May returned a chlorate concentration of 0.443 mg/L, and subsequent results have remained below the interim guideline limit. Investigative monitoring is ongoing. Additionally, whilst the Rural Water Security Strategy which may identify infrastructure solutions is finalised, Council has implemented an interim management process for the rural water supply schemes. Measures include: • In-house management of chlorine deliveries to rural sites, and maintenance of onsite chemical storage to increase turnover and minimise storage times • Development of a standard operating procedure for managing sodium hypochlorite storages at rural sites, including scheduling routine tank cleaning • Development of a chlorate risk action plan to guide proactive management efforts The success of management actions to date is apparent in Figure 10.

Figure 10: Chlorate concentrations across all schemes 2023-2025



9.0 Customer satisfaction

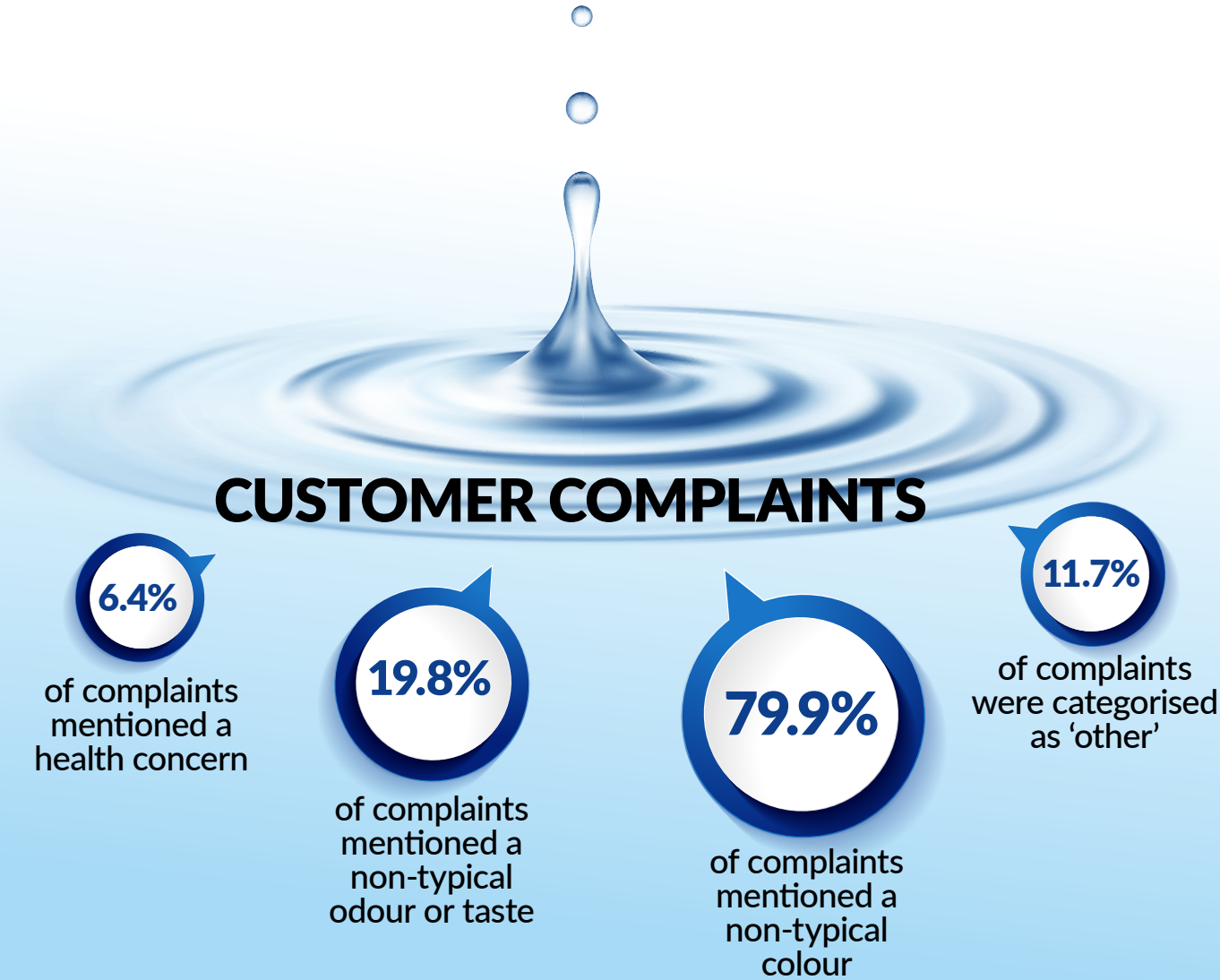
Cairns Regional Council recognises the benefit of community engagement; we value customer feedback as it enables us to continuously improve our services and confidence in our water quality. To allow us to investigate and take any appropriate action, we encourage customers or members of the community to lodge a request for service if drinking water fails to meet their expectations or our Customer Service Standards. All feedback is captured, recorded and monitored to help identify any trends and possible areas of improvement in the operation, maintenance and management of water networks.

Customers can raise urgent or non-urgent problems about drinking water quality with Council using the My Cairns app, online at www.cairns.qld.gov.au/council/contact-us, by telephoning Customer Service on 1300 69 22 47, or in person at Council Chambers,119-145 Spence Street, Cairns.

During 2024-2025 Council received a total of 358 requests for service relating to drinking water quality, often enquiries or readily resolved issues. The Guideline for the preparation, review and audit of drinking water quality management plans (Part 9) (RDMW, 2022) uses the terminology of "complaints" to refer to this customer interaction, whilst Council defines a complaint as a customer being unsatisfied with the resolution of their request for service (refer to Council's complaints process, www.cairns.qld.gov.au/council/contact-us/complaints-disclosures). For the purpose of this statutory report, the requests for service are categorised as complaints.

Complaints are categorised as referring to a non-typical odour/taste or non-typical colour in the water, as mentioning a health concern, or as "other" because they did not fall into one of those three categories. 59 of the 358 complaints were assigned to more than one category.

Figure 11: Customer complaints about drinking water by category



Taste and odour

Taste and odour complaints can vary widely based on the perception of customers, and their level of tolerance. The most common complaint descriptions in this category included chlorine, chemical or earthy tastes. Council's Water Services team responds to these enquiries by attending site to flush the service of the affected resident and obtain a chlorine residual reading. Follow up contact with the customer to confirm that the issue has been resolved is attempted.

Colour

Discoloured water can occur during periods of high demand, including water trucks filling from hydrants, or when constructions work such as water main repairs are carried out. Changes in flow direction or velocity can disturb sediment in the pipes, resulting in visibly 'dirty' water at the properties of residents. Following services restoration, aerated or 'milky' water may also be observed as a temporary effect. Water Services staff advise residents to run their taps to flush out any residue trapped in their connection, and they also attend site to flush the service and/or mains as required.

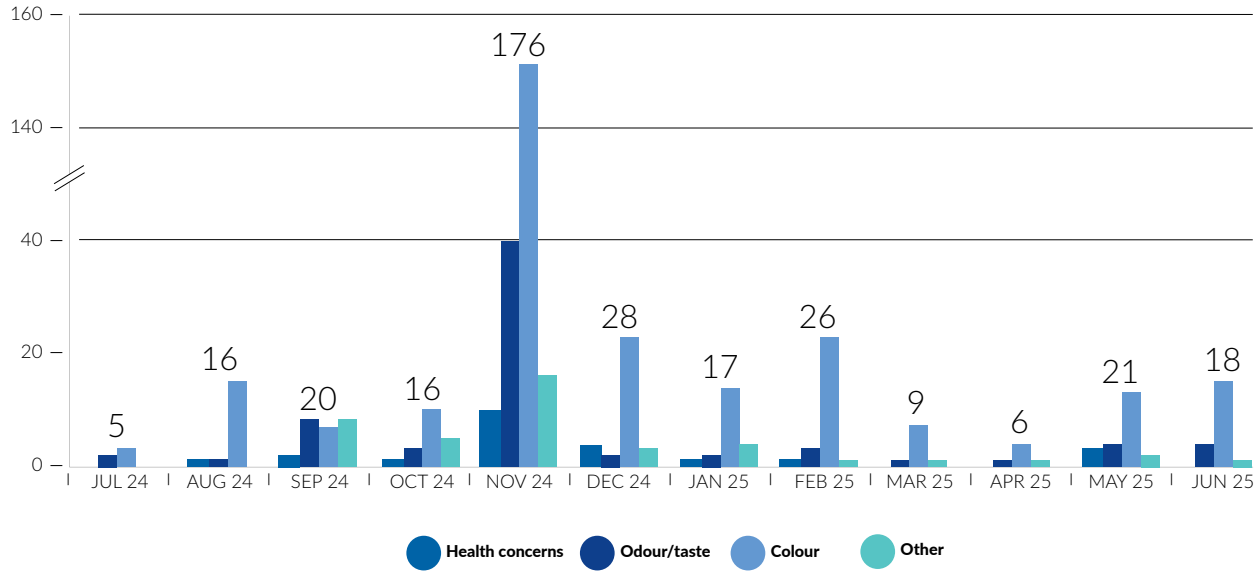
Health concern

Health concern complaints are assigned when customers believe their water supply is contributing to or causing an illness. In these cases, Water Services will attend the property and test to ensure adequate chlorine residual is maintained. The Business Performance and Compliance team is engaged to review recent laboratory verification results before contacting and reassuring the customer that all appropriate controls are in place to ensure that water supplied meets the ADWG standards. In some instances, additional laboratory testing is carried out. There have been no confirmed cases of water supply causing illness.

Other

This category is used for requests that do not clearly fit within the other complaint types. These are managed on a case-by-case basis, with Water Services staff typically attending site to flush the service, check chlorine residuals and replace service components where necessary.

Figure 12: Trends of customer complaints throughout the 2024-2025 reporting period



The majority of complaints this reporting period were received in November 2024, and related to water colour, taste, and odour. These issues coincided with several key reservoirs being offline for an extended period, which, combined with high demand, led to elevated colour levels. Additionally, oversights during the reservoir commissioning process are suspected to have contributed to a reported chemical taste and odour. As a precaution, the affected reservoir was taken offline within three days, as outlined in the *Notices of Non-Compliance with Water Quality Criteria* section.

Council maintains a web page which provides an overview of all drinking water supply systems and results of water quality testing https://www.cairns.qld.gov.au/water-waste-roads/water-supply-and-use/sources-and-supply. Live information about planned and unplanned water service interruptions is also available on the web page, https://www.cairns.qld.gov.au/water-waste-roads/service-interruptions.

10.0 References

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11.0 Appendices

Appendix A: Source Water Monitoring Summary

BABINDA						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	3.6	15.0	3.7	6.5	Pt/Co units
Calcium	4	0.58	0.73	0.65	0.65	mg/L
Chloride	4	3.90	4.70	4.60	4.45	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	1	1	1	1	1	(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	11					
Giardia	12					
Confirmed *Giardia*	2	1	1	1	1	(oo)cyst/10L
Presumptive *Giardia*	0					(oo)cyst/10L
Not Detected	10					
E. coli	13	14	410	59	92	CFU/100mL
Electrical Conductance	4	25	33	31	30	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	0.087	0.025	0.041	mg/L
ICPOES Manganese	4	<0.002	0.003	0.001	0.002	mg/L
ICPOES Silicon	4	6.300	16.000	14.500	12.825	mg/L SiO2
Magnesium	4	0.340	0.390	0.365	0.365	mg/L
pH	4	6.9	7.3	7.2	7.1	
Potassium	4	0.94	1.00	0.97w	0.97	mg/L
Sodium	4	2.90	4.60	4.10	3.93	mg/L
Sulphate	4	0.78	0.88	0.84	0.84	mg/L
Temperature	13	18.0	24.0	22.0	21.6	°C
Total Alkalinity	4	1.40	7.40	4.75	4.58	mg CaCO3/L
Total Dissolved Salts (calc)	4	18.00	32.00	27.50	26.25	mg/L
Total Hardness	4	2.90	3.40	3.10	3.13	mg CaCO3/L
True Colour	4	2.6	10.0	3.1	4.7	Pt/Co units
Turbidity	13	0.20	1.80	0.30	0.39	NTU

BARTLE FRERE						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	2.4	11.0	2.8	4.7	Pt/Co units
Calcium	4	0.56	0.72	0.68	0.66	mg/L
Chloride	4	3.20	4.00	3.65	3.63	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	1	1	1	1	1	(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	11					
Giardia	12					
Confirmed *Giardia*	0					(oo)cyst/10L
Presumptive *Giardia*	2	1	1	1	1	(oo)cyst/10L
Not Detected	10					
E. coli	12	8	310	32	65	CFU/100mL
Electrical Conductance	4	22	29	29	27	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	0.052	0.025	0.032	mg/L
ICPOES Manganese	4	0.001	0.002	0.001	0.001	mg/L
ICPOES Silicon	4	7.200	14.000	14.000	12.3	mg/L SiO2
Magnesium	4	0.260	0.310	0.285	0.285	mg/L
pH	4	6.9	7.2	7.1	7.1	
Potassium	4	0.63	0.79	0.78	0.75	mg/L
Sodium	4	2.80	3.90	3.75	3.55	mg/L
Sulphate	4	0.69	0.74	0.71	0.71	mg/L
Temperature	12	18.0	23.0	21.5	21.1	°C
Total Alkalinity	4	3.90	6.50	5.30	5.25	mg CaCO3/L
Total Dissolved Salts (calc)	4	18.00	28.00	27.00	25	mg/L
Total Hardness	4	2.50	3.10	2.90	2.85	mg CaCO3/L
True Colour	4	1.9	8.8	2.0	3.7	Pt/Co units
Turbidity	12	0.10	0.70	0.20	0.28	NTU

BELLENDEN KER						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	2.7	6.1	3.2	3.8	Pt/Co units
Calcium	4	0.43	0.52	0.49	0.48	mg/L
Chloride	4	4.10	4.80	4.65	4.55	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	0					(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	12					
Giardia	12					
Confirmed *Giardia*	2	1	3	2	2	(oo)cyst/10L
Presumptive *Giardia*	0					(oo)cyst/10L
Not Detected	10					
E. coli	12	20	280	88	118	CFU/100mL
Electrical Conductance	4	25	28	28	27	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	<0.050	0.025	0.025	mg/L
ICPOES Manganese	4	<0.002	<0.002	0.001	0.001	mg/L
ICPOES Silicon	4	10.000	12.000	11.500	11.25	mg/L SiO2
Magnesium	4	0.310	0.350	0.325	0.328	mg/L
pH	4	7.0	7.1	7.0	7	
Potassium	4	0.74	0.77	0.76	0.76	mg/L
Sodium	4	3.30	4.10	3.80	3.75	mg/L
Sulphate	4	0.78	0.87	0.83	0.83	mg/L
Temperature	12	18.0	23.0	21.0	20.8	°C
Total Alkalinity	4	4.00	5.10	4.85	4.7	mg CaCO3/L
Total Dissolved Salts (calc)	4	22.00	27.00	25.50	25	mg/L
Total Hardness	4	2.30	2.70	2.55	2.53	mg CaCO3/L
True Colour	4	1.7	5.0	2.3	2.8	Pt/Co units
Turbidity	12	0.20	0.40	0.30	0.27	NTU

BRAMSTON BEACH						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	1.6	35.0	3.8	11.1	Pt/Co units
Calcium	4	0.67	1.50	0.92	1	mg/L
Chloride	4	6.10	7.70	7.45	7.18	mg/L
Cryptosporidium	10					
Confirmed Cryptosporidium	2	1	1	1	1	(oo)cyst/10L
Presumptive Cryptosporidium	1	8	8	8	8	(oo)cyst/10L
Not Detected	6					
Giardia	10					
Confirmed *Giardia*	3	1	1	1	1	(oo)cyst/10L
Presumptive *Giardia*	0					(oo)cyst/10L
Not Detected	6					
E. coli	12	10	1200	26	130	CFU/100mL
Electrical Conductance	4	32	46	43	41	µS/cm
Fluoride	4	<0.03	0.03	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	0.276	0.08	0.115	mg/L
ICPOES Manganese	4	0.001	0.025	0.003	0.008	mg/L
ICPOES Silicon	4	2.700	9.100	8.900	7.4	mg/L SiO2
Magnesium	4	0.830	1.400	1.400	1.258	mg/L
pH	4	6.6	7.1	6.9	6.9	
Potassium	4	0.24	0.66	0.32	0.38	mg/L
Sodium	4	3.70	4.70	4.60	4.4	mg/L
Sulphate	4	1.10	1.20	1.10	1.13	mg/L
Temperature	12	20.0	24.0	23.0	22.8	°C
Total Alkalinity	4	3.00	8.80	6.75	6.33	mg CaCO3/L
Total Dissolved Salts (calc)	4	18.00	31.00	29.00	26.75	mg/L
Total Hardness	4	5.10	9.60	8.10	7.73	mg CaCO3/L
True Colour	4	1.1	22.0	1.6	6.6	Pt/Co units
Turbidity	12	0.10	17.00	0.20	2.12	NTU

COPPERLODE/BEHANA						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Ammonia	141	<0.020	2.5	0.03	0.068	mg/L N
Apparent Colour	204	4	>150.0	15	20.6	Pt/Co units
Calcium	14	0.33	1.4	0.46	0.56	mg/L
Chloride	2	6.2	6.7	6.45	6.45	mg/L
Conductivity (in Situ)	234	26	160	42	46	µS/cm
Cryptosporidium	48					
Confirmed *Cryptosporidium*	7	0.2	1	0.2	0.4	(oo)cyst/10L
Presumptive *Cryptosporidium*	5	0.2	1	0.2	0.4	(oo)cyst/10L
Not Detected	37					
Giardia	48					
Confirmed *Giardia*	21	0.2	1	0.4	0.5	(oo)cyst/10L
Presumptive *Giardia*	17	0.2	2	0.4	0.6	(oo)cyst/10L
Not Detected	19					
Dissolved Organic Carbon	11	0.7	2	1.1	1.3	mg/L
DO in situ (mg/L)	355	<0.10	9.1	5	4.56	mg/L
E. coli	107	<1	510	13	47	CFU/100mL
Electrical Conductance	143	35	72	42	43	µS/cm
Enterococci	28	<1	540	1	29	CFU/100mL
Heterotrophic Plate Count	79	15	2400	260	326	CFU/mL
ICPMS Aluminium*	8	0.03	0.06	0.046	0.046	mg/L
ICPMS Aluminium - dissolved	7	0.02	0.043	0.028	0.03	mg/L
ICPMS Arsenic	2	0.001	0.0011	0.0011	0.0011	mg/L
ICPMS Iron*	19	0.016	0.39	0.27	0.2	mg/L
ICPMS Iron - dissolved	7	<0.015	<0.050	0.008	0.012	mg/L
ICPMS Manganese*	19	0.0012	0.071	0.0289	0.0272	mg/L
ICPMS Manganese - dissolved	7	<0.001	0.001	0.001	0.001	mg/L
ICPMS Tin	2	<0.001	<0.001	0.001	0.001	mg/L
ICPOES Aluminium*	5	<0.100	<0.100	0.05	0.05	mg/L
ICPOES Aluminium - dissolved	5	<0.100	<0.100	0.05	0.05	mg/L
ICPOES Iron*	279	<0.050	57.8	0.387	1.133	mg/L
ICPOES Iron- dissolved	5	<0.050	0.051	0.025	0.03	mg/L
ICPOES Manganese*	279	<0.002	2.38	0.041	0.129	mg/L
ICPOES Manganese - dissolved	5	<0.00	<0.00	<0.00	0	mg/L
ICPOES Silicon	2	9.3	10	9.65	9.65	mg/L SiO2
Magnesium	14	0.37	1.1	0.465	0.539	mg/L
Ortho phosphate (OP)	141	<0.01	0.08	<0.01	0.01	mg/L P

COPPERLODE/BEHANA						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
pH*	155	6.3	7.5	7.1	7	
pH (in situ)*	235	5.4	7.7	6.4	6.4	pH units
Potassium	2	0.64	0.69	0.67	0.67	mg/L
Reported Chlorophyll a	28	<1.000	32	11.5	12.096	µg/L
Sodium	2	4.4	4.8	4.6	4.6	mg/L
Sulfide as S2-	12	<0.1	<0.1	<0.1	0.1	mg/L
Sulphate	2	1	1.1	1.05	1.05	mg/L
Temperature	355	2.2	29	24	23.8	°C
Thermotolerant Coliforms	28	15	900	99	241	CFU/100mL
TN	13	<0.10	2.7	0.05	0.27	mg/L N
TN (Low Level)	136	0.11	1.3	0.22	0.24	mg/L N
TON	153	<0.01	0.15	0.02	0.03	mg/L N
Total Alkalinity	75	3.7	28	8.5	8.42	mg CaCO3/L
Total Coliforms	107	290	52000	3800	6207	CFU/100mL
Total Dissolved Salts (calc)	2	25	25	25	25	mg/L
Total Hardness	14	2.3	8	3.05	3.61	mg CaCO3/L
Total Nitrogen as N	24	0.11	0.24	0.15	0.16	mg/L
Total Organic Carbon	12	0.8	2.3	1.05	1.3	mg/L
Total Phosphorus as P	24	<0.005	0.019	0.006	0.006	mg/L
TP (Low Level)	137	<0.02	0.04	0.01	0.01	mg/L P
True Colour	14	3	>150.0	4.3	18.0	Pt/Co units
Turbidity	239	0.2	57	1.6	2.58	NTU
Blue-Green Algae						
Aphanocapsa (Cyan.)	5	360	4500	640	1472	Cells/mL
Chlorophyta	47	100	31000	1000	2785	Cells/mL
Chroococcus (Cyanophyta)	1	200	200	200	200	Cells/mL
Chrysophyta	12	20	140	90	86.7	Cells/mL
Cryptophyta (Cryptophytes)	15	20	640	120	159	Cells/mL
Cyanogranis (Cyan.)	39	240	12800	2000	2875	Cells/mL
Diatoms (Bacillariophyta)	45	30	2700	320	632	Cells/mL
Dinophyta (Dinoflagellates)	24	10	300	80	98.3	Cells/mL
Euglenophyta (Euglenoids)	4	40	100	50	60	Cells/mL
Mixed Algae (No Cyanophyta Detected)	13	<100	<100	50	50	Cells/mL
Pseudanabaena (Cyan.)	1	400	400	400	400	Cells/mL
Rhabdogloea (Cyanophyta)	3	720	2600	800	1373.3	Cells/mL

COPPERLODE/BEHANA						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Pesticides						
Azinphos-ethyl	2	<0.020	<0.020	0.01	0.01	µg/L
Azinphos-methyl	2	<0.020	<0.020	0.01	0.01	µg/L
Bromophos-ethyl	2	<0.100	<0.100	0.05	0.05	µg/L
Carbofenothion	2	<0.020	<0.020	0.01	0.01	µg/L
Chlorfenvinphos	2	<0.020	<0.020	0.01	0.01	µg/L
Chlorpyrifos	2	<0.020	<0.020	0.01	0.01	µg/L
Chlorpyrifos-methyl	2	<0.200	<0.200	0.1	0.1	µg/L
Coumaphos	2	<0.010	<0.010	0.005	0.005	µg/L
Demeton-O	2	<0.020	<0.020	0.01	0.01	µg/L
Demeton-O & Demeton-S	2	<0.020	<0.020	0.01	0.01	µg/L
Demeton-S	2	<0.020	<0.020	0.01	0.01	µg/L
Demeton-S-methyl	2	<0.020	<0.020	0.01	0.01	µg/L
Diazinon	2	<0.010	<0.010	0.005	0.005	µg/L
Dichlorvos	2	<0.200	<0.200	0.1	0.1	µg/L
Dimethoate	2	<0.020	<0.020	0.01	0.01	µg/L
Disulfoton	2	<0.050	<0.050	0.025	0.025	µg/L
EPN	2	<0.050	<0.050	0.025	0.025	µg/L
Ethion	2	<0.020	<0.020	0.01	0.01	µg/L
Ethoprophos	2	<0.010	<0.010	0.005	0.005	µg/L
Fenamiphos	2	<0.010	<0.010	0.005	0.005	µg/L
Fenchlorphos (Ronnel)	2	<10.000	<10.000	5.0	5.0	µg/L
Fenitrothion	2	<2.000	<2.000	1.0	1.0	µg/L
Fensulfothion	2	<0.010	<0.010	0.005	0.005	µg/L
Fenthion	2	<0.050	<0.050	0.025	0.025	µg/L
Malathion	2	<0.020	<0.020	0.01	0.01	µg/L
Mevinphos	2	<0.020	<0.020	0.01	0.01	µg/L
Monocrotophos	2	<0.020	<0.020	0.01	0.01	µg/L
Omethoate	2	<0.010	<0.010	0.005	0.005	µg/L
Parathion	2	<0.200	<0.200	0.1	0.1	µg/L
Parathion-methyl	2	<0.500	<0.500	0.25	0.25	µg/L
Phorate	2	<0.100	<0.100	0.05	0.05	µg/L
Pirimiphos-ethyl	2	<0.010	<0.010	0.005	0.005	µg/L
Pirimiphos-methyl	2	<0.010	<0.010	0.005	0.005	µg/L
Profenofos	2	<0.010	<0.010	0.005	0.005	µg/L
Prothiofos	2	<0.100	<0.100	0.05	0.05	µg/L

COPPERLODE/BEHANA						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Sulfotep	2	<0.005	<0.005	0.003	0.003	µg/L
Sulprofos	2	<0.050	<0.050	0.025	0.025	µg/L
Temephos	2	<0.020	<0.020	0.01	0.01	µg/L
Terbufos	2	<0.010	<0.010	0.005	0.005	µg/L
Tetrachlorvinphos	2	<0.010	<0.010	0.005	0.005	µg/L
Triazophos	2	<0.005	<0.005	0.003	0.003	µg/L
Trichlorfon	2	<0.020	<0.020	0.01	0.01	µg/L
Trichloronate	2	<0.500	<0.500	0.25	0.25	µg/L

*Parameter duplication can occur due to variations in how laboratories test and report data. The identified results may be considered directly comparable for the purpose of this report.

FISHERY FALLS						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	4.9	17.0	5.2	8.1	Pt/Co units
Calcium	4	1.10	1.60	1.10	1.23	mg/L
Chloride	4	5.20	5.90	5.55	5.55	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	0					(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	12					
Giardia	12					
Confirmed *Giardia*	1	2	2	2	2	(oo)cyst/10L
Presumptive *Giardia*	0					(oo)cyst/10L
Not Detected	11					
E. coli	12	16	470	66	123	CFU/100mL
Electrical Conductance	4	41	47	43	43	µS/cm
Fluoride	4	<0.03	0.04	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	0.080	0.025	0.039	mg/L
ICPOES Manganese	4	<0.002	0.002	0.001	0.001	mg/L
ICPOES Silicon	4	14.000	19.000	16.500	16.5	mg/L SiO2
Magnesium	4	0.880	1.300	0.910	1	mg/L
pH	4	7.3	7.4	7.4	7.4	
Potassium	4	0.76	0.81	0.78	0.79	mg/L
Sodium	4	4.90	5.50	5.20	5.2	mg/L
Sulphate	4	1.10	1.10	1.10	1.1	mg/L
Temperature	12	19.0	24.0	21.5	21.4	°C
Total Alkalinity	4	9.40	12.00	9.70	10.2	mg CaCO3/L
Total Dissolved Salts (calc)	4	36.00	40.00	37.00	37.5	mg/L
Total Hardness	4	6.30	9.30	6.40	7.1	mg CaCO3/L
True Colour	4	3.4	14.0	3.8	6.3	Pt/Co units
Turbidity	12	0.20	1.40	0.40	0.48	NTU

MIRRIWINNI						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	2.0	10.0	2.1	4	Pt/Co units
Calcium	4	0.41	0.45	0.45	0.44	mg/L
Chloride	4	3.20	4.20	4.05	3.88	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	0					(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	12					
Giardia	12					
Confirmed *Giardia*	2	1	1	1	1	(oo)cyst/10L
Presumptive *Giardia*	0					(oo)cyst/10L
Not Detected	10					
E. coli	13	18	230	71	86	CFU/100mL
Electrical Conductance	4	22	29	28	27	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
ICPOES Iron	4	<0.050	<0.050	0.025	0.025	mg/L
ICPOES Manganese	4	<0.002	0.003	0.001	0.002	mg/L
ICPOES Silicon	4	6.700	14.000	13.500	11.925	mg/L SiO2
Magnesium	4	0.280	0.300	0.290	0.29	mg/L
pH	4	6.9	7.2	7.1	7.1	
Potassium	4	0.68	0.88	0.85	0.81	mg/L
Sodium	4	2.80	4.00	3.85	3.63	mg/L
Sulphate	4	0.65	0.81	0.73	0.73	mg/L
Temperature	13	18.0	23.0	21.0	20.6	°C
Total Alkalinity	4	1.60	5.50	4.35	3.95	mg CaCO3/L
Total Dissolved Salts (calc)	4	17.00	27.00	26.00	24	mg/L
Total Hardness	4	2.20	2.40	2.30	2.3	mg CaCO3/L
True Colour	4	1.4	8.2	1.7	3.3	Pt/Co units
Turbidity	13	0.10	1.30	0.20	0.29	NTU

MOUNTAIN VIEW						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	4.3	9.9	5.3	6.2	Pt/Co units
Calcium	4	3.00	3.30	3.20	3.18	mg/L
Chloride	4	5.50	6.00	5.80	5.78	mg/L
Cryptosporidium	10					
Confirmed *Cryptosporidium*	1	1	1	1	1	(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	9					
Giardia	10					
Confirmed *Giardia*	1	1	1	1	1	(oo)cyst/10L
Presumptive *Giardia*	1	1	1	1	1	(oo)cyst/10L
Not Detected	9					
E. coli	12	62	480	124	165	CFU/100mL
Electrical Conductance	4	57	59	58	58	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
ICPOES Iron	4	0.056	0.309	0.084	0.133	mg/L
ICPOES Manganese	4	0.005	0.025	0.008	0.011	mg/L
ICPOES Silicon	4	18.000	19.000	19.000	18.75	mg/L SiO2
Magnesium	4	1.000	1.200	1.100	1.1	mg/L
pH	4	7.2	7.2	7.2	7.2	
Potassium	4	0.95	1.20	1.05	1.06	mg/L
Sodium	4	5.80	6.20	6.00	6	mg/L
Sulphate	4	1.20	1.40	1.20	1.25	mg/L
Temperature	12	19.0	26.0	23.0	22.6	°C
Total Alkalinity	4	17.00	18.00	17.00	17.25	mg CaCO3/L
Total Dissolved Salts (calc)	4	46.00	48.00	47.50	47.25	mg/L
Total Hardness	4	12.00	13.00	12.50	12.5	mg CaCO3/L
True Colour	4	2.9	8.2	3.5	4.5	Pt/Co units
Turbidity	12	0.30	2.20	0.45	0.63	NTU

ORCHID VALLEY						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
Apparent Colour	4	4.4	9.7	4.8	5.9	Pt/Co units
Calcium	4	2.50	2.80	2.65	2.65	mg/L
Chloride	4	4.90	5.60	5.40	5.33	mg/L
Cryptosporidium	12					
Confirmed *Cryptosporidium*	0					(oo)cyst/10L
Presumptive *Cryptosporidium*	0					(oo)cyst/10L
Not Detected	12					
Giardia	12					
Confirmed *Giardia*	2	1	1	1	1	(oo)cyst/10L
Presumptive *Giardia*	1	2	2	2	2	(oo)cyst/10L
Not Detected	9					
E. coli	60	28	1300	58	129	CFU/100mL
Electrical Conductance	4	50	53	52	52	µS/cm
Fluoride	4	<0.03	<0.03	0.02	0.02	mg/L
Heterotrophic Plate Count	48	120	>20000	405	1053	CFU/mL
ICPMS Aluminium	49	<0.010	0.369	0.03	0.043	mg/L
ICPMS Antimony	49	<0.000	<0.001	0.001	0.0	mg/L
ICPMS Arsenic	49	<0.0010	0.0200	0.0009	0.0012	mg/L
ICPMS Barium	49	0.005	0.010	0.006	0.006	mg/L
ICPMS Beryllium	49	<0.0001	<0.0010	0.0001	0.0003	mg/L
ICPMS Boron	49	<0.050	<0.050	0.025	0.025	mg/L
ICPMS Cadmium	49	<0.0001	<0.0001	0.0001	0.0001	mg/L
ICPMS Chromium	49	<0.001	0.001	0.0	0.0	mg/L
ICPMS Cobalt	49	<0.0001	0.0010	0.0003	0.0003	mg/L
ICPMS Copper	49	<0.001	0.113	0.001	0.003	mg/L
ICPMS Iron	49	<0.050	6.240	0.062	0.2	mg/L
ICPMS Lead	49	<0.0001	<0.0010	0.0003	0.0003	mg/L
ICPMS Manganese	49	0.0040	0.2830	0.0055	0.0119	mg/L
ICPMS Molybdenum	49	<0.001	<0.001	0.0	0.0	mg/L
ICPMS Nickel	49	<0.000	<0.001	0.0	0.0	mg/L
ICPMS Selenium	49	<0.002	<0.010	0.001	0.003	mg/L
ICPMS Silver	49	<0.000	<0.001	0.0	0.0	mg/L
ICPMS Thallium	49	<0.000	<0.001	0.0	0.0	mg/L
ICPMS Thorium	49	<0.000	<0.002	0.001	0.0	mg/L
ICPMS Tin	49	<0.000	<0.001	0.001	0.0	mg/L
ICPMS Titanium	49	<0.000	0.017	0.003	0.003	mg/L

ORCHID VALLEY						
Result name	**Number of tests**	**Minimum**	**Maximum**	**Median**	**Average**	**Units**
ICPMS Uranium	49	<0.000	<0.001	0.0	0.0	mg/L
ICPMS Vanadium	49	<0.0003	<0.0100	0.0002	0.0024	mg/L
ICPMS Zinc	49	<0.003	0.012	0.003	0.003	mg/L
ICPOES Iron	4	<0.050	0.091	0.068	0.063	mg/L
ICPOES Manganese	4	0.005	0.008	0.007	0.007	mg/L
ICPOES Silicon	4	17.000	19.000	17.5	17.75	mg/L SiO2
Iron Related Bacteria - Population Est.	49	150.0	9000.0	500.0	1803.1	CFU/mL
Magnesium	4	0.810	0.860	0.825	0.83	mg/L
Mixed Algae (No Cyanophyta Detected)	47	<100	<100	50	50	<100
pH	4	7.2	7.3	7.2	7.2	
Potassium	4	0.95	1.10	1.05	1.04	mg/L
Sodium	4	5.20	5.90	5.60	5.58	mg/L
Sulphate	4	1.10	1.20	1.10	1.13	mg/L
Temperature	12	19.0	25.0	22.5	22.2	°C
Total Alkalinity	4	14.00	16.00	15.00	15	mg CaCO3/L
Total Coliforms	48	2100	78000	7400	12392	CFU/100mL
Total Dissolved Salts (calc)	4	41.00	45.00	43.50	43.25	mg/L
Total Hardness	4	9.70	11.00	9.95	10.15	mg CaCO3/L
True Colour	4	2.7	7.5	3.1	4.1	Pt/Co units
Turbidity	61	0.20	33.00	0.40	1.23	NTU

Appendix B: Verification Monitoring Summary

BABINDA										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	104	101	0.9	<1.0	4.6	0.5			
Chlorate	mg/L		12	0.33	0.16	0.67	0.30	≤0.8mg/L*		
E. coli	CFU/ 100mL	104	105	<1	<1	<1	<1	<1 CFU/ 100mL		
Free Chlorine	mg/L	104	105	0.98	0.33	1.80	1.00			
Heterotrophic Plate Count	CFU/mL	104	101	6	<10	30	5			
ICPMS Aluminium	mg/L	26	26	0.029	0.010	0.094	0.027	≤0.2 mg/L		
ICPMS Copper	mg/L	26	26	0.027	0.005	0.078	0.020	≤1.0 mg/L		
ICPMS Iron	mg/L	26	26	0.023	<0.015	<0.050	0.025	≤0.3 mg/L		
ICPMS Lead	mg/L	26	26	0.0005	<0.0005	0.0010	0.0005	≤0.01 mg/L**		
ICPMS Manganese	mg/L	26	26	0.0005	0.0002	0.0009	0.0005	≤0.1 mg/L**		
pH		104	101	7.2	6.3	7.8	7.4	6.5 - 8.5	3	The three aesthetic exceedances in this scheme were just below the guideline limit. Drinking water with a pH below 6.5 can affect the solubility of heavy metals and result in corrosion. Council routinely monitors for metals in the drinking water system to ensure that the quality of water supplied is not compromised by low pH
Temperature	°C	104	105	25.7	21.0	29.0	26.0			
Total Chlorine	mg/L	104	105	1.07	0.36	1.80	1.10	≤5 mg/L		
Total Coliforms	CFU/ 100mL	104	105	1	<1	1	<1			
Turbidity	NTU	104	101	0.22	0.10	1.10	0.20	≤5 NTU		

BARTLE FRERE										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	104	101	1.0	<1.0	4.6	0.5			
Chlorate	mg/L		12	0.33	0.16	0.67	0.30	≤0.8 mg/L*		
E. coli	CFU/100mL	104	105	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	104	105	0.98	0.33	1.80	1.00			
Heterotrophic Plate Count	CFU/mL	104	101	6	<10	30	5			
ICPMS Aluminium	mg/L	26	26	0.029	0.010	0.094	0.023	≤0.2 mg/L		
ICPMS Copper	mg/L	26	26	0.027	0.005	0.078	0.021	≤1.0 mg/L		
ICPMS Iron	mg/L	26	26	0.019	<0.015	0.035	0.025	≤0.3 mg/L		
ICPMS Lead	mg/L	26	26	0.0004	0.0001	0.0006	0.0004	≤0.01 mg/L**		
ICPMS Manganese	mg/L	26	26	0.0004	<0.0003	0.0008	0.0005	≤0.1 mg/L**		
pH		104	101	7.2	6.3	7.8	7.4	6.5 - 8.5	3	The three aesthetic exceedances in this scheme were just below the guideline limit. Drinking water with a pH below 6.5 can affect the solubility of heavy metals and result in corrosion. Council routinely monitors for metals in the drinking water system to ensure that the quality of water supplied is not compromised by low pH
Temperature	°C	104	105	25.7	21.0	29.0	26.0			
Total Chlorine	mg/L	104	105	1.07	0.36	1.80	1.10	≤5 mg/L		
Total Coliforms	CFU/100mL	104	105	1	<1	1	1			
Turbidity	NTU	104	101	0.22	0.10	1.10	0.20	≤5 NTU		

BELLENDEN KER										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	51	0.8	<1.0	5.0	0.5			
Chlorate	mg/L		11	0.38	0.20	0.66	0.40	≤0.8 mg/L*		
E. coli	CFU/100mL	52	53	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	53	1.02	0.51	1.50	1.00			
Heterotrophic Plate Count	CFU/mL	52	51	7	<10	60	5			
ICPMS Aluminium	mg/L	13	13	0.054	0.031	0.091	0.051	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.007	0.005	0.010	0.007	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.019	<0.015	0.035	0.025	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0003	0.0001	<0.0010	0.0003	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0005	0.0003	0.0014	0.0005	≤0.1 mg/L**		
pH		52	51	8.6	7.5	9.1	8.8	6.5 - 8.5	37	Aesthetic exceedances are commonly associated with an interaction between the water and cement lined pipes in the reticulation network. Alkaline water above a pH of 8 can impair the efficiency of chlorine disinfection. Council closely monitors disinfection performance through testing microbial indicators to ensure the effectiveness of chlorine is not compromised by elevated pH
Temperature	°C	52	53	26.1	22.0	30.0	26.0			
Total Chlorine	mg/L	52	53	1.11	0.66	1.60	1.10	≤5 mg/L		
Total Coliforms	CFU/100mL	52	53	1	<1	1	1			
Turbidity	NTU	52	51	0.25	0.10	1.30	0.20	≤5 NTU		

BRAMSTON BEACH										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	50	0.9	<1.0	3.6	0.5			
Chlorate	mg/L		12	0.33	0.14	0.66	0.29	≤0.8 mg/L*		
E. coli	CFU/100mL	52	52	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	52	0.77	0.40	1.00	0.78			
Heterotrophic Plate Count	CFU/mL	52	50	15	<10	480	5			
ICPMS Aluminium	mg/L	13	13	0.021	0.010	0.038	0.016	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.014	0.010	0.019	0.013	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.042	0.015	0.240	0.025	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0004	<0.0005	0.0006	0.0005	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0013	<0.0003	0.0118	0.0005	≤0.1 mg/L**		
pH		52	50	7.4	7.2	7.6	7.4	6.5 - 8.5		
Temperature	°C	52	52	27.5	23.0	32.0	28.0			
Thermophilic Amoeba		12	12	Not detected	Not detected	Not detected	Not detected			
Total Chlorine	mg/L	52	52	0.88	0.55	1.10	0.87	≤5 mg/L		
Total Coliforms	CFU/100mL	52	52	1	<1	5	1			
Turbidity	NTU	52	50	0.43	0.10	4.10	0.20	≤5 NTU		

COPPERLODE/BEHANA										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Ammonia	mg/L as N	4	4	0.01	<0.020	<0.020	<0.020	≤0.39 mg/L		
Apparent Colour	Pt/Co units	1521	1454	0.9	<1.0	22.0	<1.0			
Bromodichlor-omethane	µg/L	142	142	7.014	<5.000	15.000	7.000			
Bromoform	µg/L	142	142	2.5	<5.000	<5.000	<5.000			
Chlorate	mg/L		16	0.19	0.05	0.58	0.19	≤0.8 mg/L*		
Chloride	mg/L	4	4	7.58	7.40	8.00	7.45	≤250.0 mg/L		
Chlorite	mg/L	138	138	0.0	<0.01	0.01	<0.00	≤0.8 mg/L		
Chloroform	µg/L	142	142	27.852	<5.000	78.000	23.500			
Dibromochlor-omethane	µg/L	142	142	2.5	<5.000	<5.000	<5.000			
E. coli	CFU/100mL	2123	2096	1	<1	2	<1	<1.0 CFU/100mL	1	An estimated 2CFU/100mL of *E. coli* was detected in a routine verification monitoring sample collected from Machans Beach on 3 February 2025. This was reported as an incident and is detailed further in Section 8
Electrical Conductance	µS/cm	52	52	59	34	64	59			
Free Chlorine	mg/L	2123	2096	0.92	<0.10	3.40	0.91			
Heterotrophic Plate Count	CFU/mL	2121	2037	30	<10	>20000	<10			
ICPMS Aluminium	mg/L	598	591	0.027	<0.015	0.328	0.02	≤0.2 mg/L	1	There was a single exceedance of the aesthetic guideline limit for aluminium during the reporting period. A value of 0.328 mg/L was recorded at Edmonton Down St Park on 10 June 2025. The site and adjacent hydrants were flushed and subsequent tests returned results below the ADWG limit
ICPMS Copper	mg/L	598	591	0.006	<0.001	0.080	0.004	≤1.0 mg/L		

COPPERLODE/BEHANA										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
ICPMS Iron	mg/L	598	591	0.023	<0.015	0.540	0.025	≤0.3 mg/L	1	There was a single exceedance of the aesthetic guideline limit for iron during the reporting period. A value of 0.54 mg/L was recorded at the Edge Hill – Red Arrow Walking Track on 16 October 2024. Subsequent rounds of testing have returned results below the ADWG limit
ICPMS Lead	mg/L	598	561	0.0005	<0.0001	0.0060	0.0005	≤0.01 mg/L**		
ICPMS Manganese	mg/L	598	591	0.0059	<0.0003	0.2230	0.0011	≤0.1 mg/L**	4	There were four exceedances of the ADWG aesthetic guideline for manganese during the reporting period, all within the Copperlode/Behana scheme. Two of these, sampled in November 2024, were associated with a dirty water event linked to high demand. Subsequent samples at all sites have returned compliant results and do not indicate any trends of concern
ICPMS Zinc	mg/L	4	4	0.003	<0.005	<0.008	0.003	≤3.0 mg/L		
ICPOES Aluminium	mg/L		19	0.05	<0.100	<0.100	0.05	≤0.2 mg/L		
ICPOES Copper	mg/L		19	0.008	<0.015	<0.015	0.008	≤1.0 mg/L		
ICPOES Iron	mg/L		19	0.025	<0.050	<0.050	0.025	≤0.3 mg/L		
ICPOES Manganese	mg/L		19	0.008	<0.002	0.051	0.001	≤0.1 mg/L**		
ICPOES Silicon	mg/ L SiO2	4	4	9.575	8.500	10.000	9.9	≤80 mg/L SiO2		
Nitrate	mg/L as N	4	4	0.07	0.010	0.140	0.065	≤11.3 mg/L		
Nitrite	mg/L as N	4	4	0.005	<0.010	<0.010	0.005	≤0.91 mg/L		
pH		2123	2037	7.5	6.5	8.8	7.5	6.5 - 8.5		
Sodium	mg/L	4	4	6.78	6.20	7.30	6.80	≤180.0 mg/L		

COPPERLODE/BEHANA										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Sulphate	mg/L	4	4	3.07	0.69	5.30	3.15	≤250.0 mg/L		
Temperature	°C	2123	2096	25.9	18.0	36.0	26.0			
Thermophilic amoeba (Naegleria)		60	59	Not detected	Not detected	Not detected	Not detected			
TON	mg/L as N	4	4	0.07	0.01	0.14	0.07			
Total Alkalinity	mg CaCO3 / L	756	686	8.47	<1.00	13.00	8.60			
Total Chlorine	mg/L	2123	2096	1.02	<0.10	3.50	1.00	≤5.0 mg/L		
Total Coliforms	CFU/100mL	2123	2093	1	<1	>100	1			
Total Dissolved Solids	mg/L	4	4	37.75	36.00	40.00	37.50	≤600 mg/L		
Total Trihalo-methanes	µg/L	142	142	34.761	<5.000	86.000	29.500	≤250.0 µg/L		
True Colour	Pt/Co units		1	0.5	<1.0	<1.0	0.5	≤15.0 Pt/Co units		
Turbidity	NTU	1521	1454	0.17	<0.10	6.10	0.10	≤5 NTU	1	There was a single exceedance of the aesthetic guideline limit for turbidity during the reporting period. A value of 6.1NTU was recorded at Edmonton Down St Park on 10 June 2025. The site and adjacent hydrants were flushed, and subsequent tests returned results below the ADWG limit

FISHERY FALLS										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	50	1.3	<1.0	5.3	1.3			
Chlorate	mg/L		12	0.35	0.13	0.57	0.34	≤0.8 mg/L*		
E. coli	CFU/100mL	52	52	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	52	0.84	0.48	1.20	0.82			
Heterotrophic Plate Count	CFU/mL	52	50	6	<10	20	5			
ICPMS Aluminium	mg/L	13	13	0.03	0.010	0.069	0.026	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.005	0.003	0.007	0.005	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.024	<0.015	0.055	0.025	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0004	0.0001	<0.0010	0.0003	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0006	<0.0003	0.0027	0.0005	≤0.1 mg/L**		
pH		52	50	7.7	7.6	7.8	7.7	6.5 - 8.5		
Temperature	°C	52	52	25.1	21.0	29.0	25.5			
Total Chlorine	mg/L	52	52	0.92	0.57	1.30	0.92	≤5 mg/L		
Total Coliforms	CFU/100mL	52	52	1	<1	<1	1			
Turbidity	NTU	52	50	0.29	0.10	1.40	0.20	≤5 NTU		

MIRRIWINNI										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	50	0.6	<1.0	1.7	0.5			
Chlorate	mg/L		12	0.32	0.15	0.69	0.32	≤0.8 mg/L*		
E. coli	CFU/100mL	52	52	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	52	1.01	0.70	1.50	1.00			
Heterotrophic Plate Count	CFU/mL	52	50	5	<10	10	5			
ICPMS Aluminium	mg/L	13	13	0.023	0.010	0.045	0.020	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.009	0.006	0.011	0.009	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.017	<0.015	<0.050	0.022	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0003	0.0001	<0.0010	0.0003	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0004	<0.0003	<0.0010	0.0004	≤0.1 mg/L**		
pH		52	50	7.4	7.2	7.5	7.4	6.5 - 8.5		
Temperature	°C	52	52	24	20.0	26.0	24.0			
Total Chlorine	mg/L	52	52	1.1	0.77	1.60	1.10	≤5 mg/L		
Total Coliforms	CFU/100mL	52	52	1	<1	<1	1			
Turbidity	NTU	52	50	0.18	0.10	0.50	0.15	≤5 NTU		

MOUNTAIN VIEW										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	51	1.7	<1.0	7.2	1.2			
Chlorate	mg/L		12	0.47	0.16	0.91	0.38	≤0.8 mg/L*	1	Queensland Health has established an interim guideline value for chlorate concentrations in drinking water. During investigative monitoring in the Mountain View scheme, a single exceedance was detected. This was reported to the regulator and is detailed further in Section 8
E. coli	CFU/100mL	52	53	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	53	1.09	0.77	1.90	1.10			
Heterotrophic Plate Count	CFU/mL	52	51	6	<10	20	5			
ICPMS Aluminium	mg/L	13	13	0.025	0.010	0.060	0.020	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.032	0.025	0.040	0.030	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.048	<0.050	0.078	0.050	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0005	<0.0005	0.0009	0.0005	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0009	<0.0010	0.0021	0.0006	≤0.1 mg/L**		
pH		52	51	7.5	7.3	7.6	7.5	6.5 - 8.5		
Temperature	°C	52	53	26.8	21.0	31.0	27.0			
Total Chlorine	mg/L	52	52	1.19	0.89	2.00	1.20	≤5 mg/L		
Total Coliforms	CFU/100mL	52	53	1	<1	<1	<1			
Turbidity	NTU	52	51	0.51	0.20	2.50	0.30	≤5 NTU		

ORCHID VALLEY										
Result Name	**Units**	**Number of samples planned to be collected as per DWQMP**	**Number of Tests**	**Average**	**Minimum**	**Maximum**	**Median**	**ADWG Limit**	**Number of ADWG exceedances**	**Comments**
Apparent Colour	Pt/Co units	52	51	1.9	<1.0	13.0	1.3			
Chlorate	mg/L		12	0.41	0.17	0.82	0.34	≤0.8 mg/L*		
E. coli	CFU/100mL	52	53	1	<1	<1	1	<1 CFU/100mL		
Free Chlorine	mg/L	52	53	1.2	0.85	2.20	1.20			
Heterotrophic Plate Count	CFU/mL	52	51	9	<10	130	5			
ICPMS Aluminium	mg/L	13	13	0.03	0.010	0.091	0.027	≤0.2 mg/L		
ICPMS Copper	mg/L	13	13	0.032	0.019	0.042	0.031	≤1.0 mg/L		
ICPMS Iron	mg/L	13	13	0.039	<0.050	0.070	0.032	≤0.3 mg/L		
ICPMS Lead	mg/L	13	13	0.0005	0.0002	0.0006	0.0005	≤0.01 mg/L**		
ICPMS Manganese	mg/L	13	13	0.0016	<0.0010	0.0053	0.0010	≤0.1 mg/L**		
pH		52	51	7.4	6.4	7.7	7.5	6.5 - 8.5	1	Drinking water with a pH below 6.5 can affect the solubility of heavy metals and result in corrosion. Council routinely monitors for metals in the drinking water system to ensure that the quality of water supplied is not compromised by low pH
Temperature	°C	52	53	26.1	21.0	30.0	27.0			
Total Chlorine	mg/L	52	53	1.29	0.93	2.20	1.30	≤5 mg/L		
Total Coliforms	CFU/100mL	52	53	1	<1	<1	<1			
Turbidity	NTU	52	51	0.43	0.20	2.10	0.30	≤5 NTU		

*Queensland Health interim guideline value
**Lower limits apply from June 2025 as per latest ADWG advice

Appendix C: *E. coli* Compliance Monitoring Results

Drinking Water Scheme: BABINDA												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	11	8	8	10	8	7	9	8	10	8	8	8
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	112	109	109	109	108	108	107	106	108	105	103	103
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

Drinking Water Scheme: BARTLE FRERE												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	11	8	9	9	8	8	10	8	10	8	8	8
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	116	113	113	112	112	112	110	109	109	106	106	105
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

Drinking Water Scheme: BELLENDEN KER												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	6	4	4	5	4	4	5	4	5	4	4	4
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	56	55	55	55	54	54	54	54	55	53	53	53
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

Drinking Water Scheme: BRAMSTON BEACH												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	5	4	4	5	4	4	5	4	5	4	4	4
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	55	54	53	53	53	53	53	52	53	52	52	52
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

Drinking Water Scheme: COPPERLODE/BEHANA												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	212	164	186	161	158	151	191	163	164	208	162	176
No. of samples collected in which *E. coli* is detected (i.e. a failure)	0	0	0	0	0	0	0	1	0	0	0	0
No. of samples collected in previous 12 month period	2325	2276	2286	2233	2201	2201	2173	2156	2146	2145	2100	2096
No. of failures for previous 12 month period	1	1	1	1	1	0	0	1	1	1	1	1
% 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

Drinking Water Scheme: FISHERY FALLS												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	5	4	4	5	4	4	5	4	5	4	4	4
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	59	58	57	57	56	56	56	56	56	55	54	52
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

Drinking Water Scheme: MIRRIWINNI												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	5	4	4	5	4	4	5	4	5	4	4	4
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	59	56	56	55	55	55	53	53	54	52	52	52
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

Drinking Water Scheme: MOUNTAIN VIEW												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	6	4	5	4	4	4	5	4	4	5	4	4
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	54	53	54	54	53	54	54	54	54	54	53	53
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

Drinking Water Scheme: ORCHID VALLEY												
Year	**2024 to 2025**											
Month	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**
No. of samples collected	5	4	6	4	4	4	5	4	4	5	4	4
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	56	58	58	57	57	56	55	55	55	54	53
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