



# **Drinking Water Quality Management Plan Annual Report**

Croydon Shire Council

SPID: 39

2023-2024

This report has been prepared in accordance with the Drinking Water Quality Management Plan Report Guidance Note.

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# 1 Introduction

This is the Drinking Water Quality Management Plan (DWQMP) Annual Report for Croydon Shire Council for the financial year 2023-2024.

Croydon Shire Council is registered service provider with identification (SPID) number 39.

Croydon Shire Council is operating under an approved Drinking Water Quality Management Plan to ensure consistent supply of safe quality drinking water in order to protect public health. This is done through proactive identification and minimisation of public health related risks associated with drinking water.

This Drinking Water Quality Management Plan Annual Report includes:

- The activities undertaken over the financial year in operating our drinking water service
- Drinking water quality summary
- Summary of our performance in implementing our approved Drinking Water Quality Management Plan

This report is submitted to the Regulator to fulfil our regulatory requirement, and is made available to our customers through our website or for inspection upon request at the Croydon Shire Council Administration Office.

## 2 Summary of scheme/s operated

*Table 1 – Summary of schemes*

	<i>Water Source</i>	<i>Treatment processes</i>	<i>Treatment capacity</i>	<i>Towns supplied</i>
Croydon Drinking Water Supply	Lake Belmore 100%	flocculation, filtration, disinfection	0.95ML/day	Croydon
	Butterfly North Emergency Supply Only			

### 3 DWQMP implementation

Water staff met weekly to discuss water issues. This provides opportunity to refer to the approved Drinking Water Quality Management Plan and emphasise the importance of using the plan.

Discussions include the following key topics:

1. Risk Management

The process of keeping drinking water safe is a high priority. Through efficient operations and implementation of the DWQMP, Council has ensured effective risk management to assure safe quality of drinking water. During the reporting period, Council supplied drinking water that complied with the water quality standards set in the Australian Drinking Water Guidelines (ADWG).

2. Monitoring

Council maintains comprehensive monitoring programs to ensure that the quality of water supplied to customers is safe. The monitoring program assist to identify any issue before it becomes a significant water quality incident.

Council also undertakes operational monitoring, which includes the planned sequence of measurements and observations to assess and confirm the performance of our preventive or control measures.

Council sends monthly, microbiology samples to the Cairns Regional Council Water Laboratory, which is NATA accredited, as per the DWQMP.

3. Improvement plan

Council maintains a culture of continuous improvement and are implementing the Improvement Plan of the DWQMP.

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The actions undertaken to implement the risk management improvement program are discussed in Table 2.

**Table 2 – Risk management improvement program implementation status**

Scheme name	Ref	Component	Improvement actions	Target date	Actions taken to date	Status and revised target date	Responsible Officer / Position
Croydon Drinking Water Supply	1	Water Source	Construction and commissioning of a new bore		Completed	Completed	Works Manager
Croydon Drinking Water Supply	2	Reticulation	Chlorate monitoring - Sample collection - Test for chlorates		Completed	Ongoing	Water Officer
Croydon Drinking Water Supply	3	Storage and Reticulation	Develop mains network procedure and operations and maintenance manual including a procedure for: - Main breaks - Mains flushing - Reservoir cleaning		Completed	Ongoing	Water Officer
Croydon Drinking Water Supply	4	Reticulation	Capital works project to install interconnected main and eliminate reticulation dead ends	June 2025	Progression dependant on budget funds allocation	Ongoing to June 2025	Works Manager Water Officer
Croydon Drinking Water Supply	5	Reservoir	Capital works project to clean and seal the inside of the reservoir tank		Completed	Completed	Works Manager Water Officer

## 4 Verification monitoring - water quality information and summary

This section discusses the compliance with the water quality criteria.

**Table 3 – Drinking water quality performance - verification monitoring**

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
Croydon Drinking Water Supply – Reticulation (4 test locations)	E coli	60	62	<1.0 CFU/100mL	0	
	Heterotrophic Plate Count	60	62		0	
	Aluminium	2	24	<0.2	0	
	Arsenic	2	10	<0.01	0	
	Cadmium	2	10	<.002	0	
	Chromium	2	10	<0.05	0	
	Copper	2	10	<1.0	0	
	Iron	2	24	<0.3	0	
	Lead	2	10	<0.01	0	
	Manganese	2	24	<0.1	0	
	Nickel	2	10	<0.02	0	
	Zinc	2	10	<3.0	0	
	Fluoride	2	24	<1.5	0	
Croydon Drinking Water Supply – Reticulation at Reservoir Tank	Chlorine Free	12	13	>5	0	
	Chlorine Total	12	13	>5	0	
	Fluoride	2	12	>1.5	0	
	pH	12	13	6.5-7.5	0	
	Turbidity	12	13		0	



Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
	EP131A Pesticide Organochlorine Pesticides (ult)	2	2	42-143	0	
	EP234A Organophosphate Pesticides (ult)	2	2	14-166	0	
Croydon Drinking Water Supply – Raw Water – Lake Belmore	Aluminium	2	2	<0.2	0	
	Arsenic	2	2	<0.01	0	
	Cadmium	2	2	<.002	0	
	Chromium	2	2	<0.05	0	
	Copper	2	2	<2	0	
	Iron	2	2	<0.3	0	
	Lead	2	2	<0.1	0	
	Manganese	2	2	<0.1	0	
	Nickel	2	2	<0.02	0	
	Zinc	2	2	<3.0	0	
	Fluoride	2	2	<1.5	0	
Croydon Drinking Water Supply – Raw Water – Butterfly North	Aluminium	2	2	<0.2	0	
	Arsenic	2	2	<0.01	0	
	Cadmium	2	2	<.002	0	
	Chromium	2	2	<0.05	0	
	Copper	2	2	<2	0	
	Iron	2	2	<0.3	0	
	Lead	2	2	<0.1	0	
	Manganese	2	2	<0.5	0	

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
	Nickel	2	2	<0.02	0	
	Zinc	2	2	<3.0	0	
	Cyanide	2	2		0	
	Fluoride	2	2	<1.5	0	

**Table 4. *E. coli* compliance with annual value**

**Drinking water scheme:** Croydon Drinking Water Supply

Year	2023 – 2024											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

No. of samples collected	5	5	5	5	5	5	5	5	5	5	5	5
No. of samples collected in which E. coli is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12-month period	5	5	6	5	7	5	5	11	6	5	8	6
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

## 5 Incidents reported to the regulator

The incidents reported to the regulator and management actions undertaken over the financial year are provided in this section.

**Table 5 – Incidents reported to the regulator**

Incident date	Scheme / location	Parameter / issue	Preventive actions
Nil	Nil	Nil	Nil

## 6 Customer complaints

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

Refer to section 2.3.6 in the Guidance Note.

**Table 6 – Example: customer complaints about water quality**

Scheme	Health concern	Dirty water	Taste and odour	Other
Croydon Drinking Water Supply	Nil	Nil	Nil	4
<b>Total</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	<b>4</b>

## 7 DWQMP review outcomes

A summary of the outcomes of the review and how issues/changes raised in the review, were actioned is provided in this section.

**Table 7 – DWQMP review outcomes**

**Review Date: 30/06/2024**

Review component	Findings	Outcomes	Status of actions	Responsible Officer / Position
Service description	No changes	Not applicable	Not applicable	
Details of infrastructure	New Variable Speed Drives for pumps and new switch board at Lake Belmore Pump Shed	Schematic and infrastructure information needs to be updates in the approved DWQMP	Completed	Water Officer
Water quality and catchment characteristics	No changes	Not applicable	Not applicable	
Risk assessment	No changes	Not applicable	Not applicable	
Operations and maintenance procedures	Reservoir requires repairs to stop leakage	Completed – tanks cleaned and sealed	Completed	Water Officer Works Manager
Management of incidents and emergencies	Implement changes to increase record keeping	Completed - SWIM local program	Completed & Ongoing	Water Officer Works Manager
Risk management improvement program	DWQMP review	On going	In progress	Water Officer Town Infrastructure and Water supervisor Works Manager
Service wide information management	Community services manager position filled and responsible for community education and information	Improvement in notifications to community	Not applicable	CEO
Operational monitoring	Implement changes to increase record keeping	Completed - Additional staff engaged	Ongoing	Water Officer Works Manager

Review component	Findings	Outcomes	Status of actions	Responsible Officer / Position
Verification monitoring	Implement changes to increase record keeping	Completed – SWIM local program	Ongoing	Water Officer Works Manager
Chemical Dosing	Upgrade pumps and boards	Remove old pumps and boards, tidy all lines up and place new pumps and boards	Due to commence in 2025	Water Officer Town Infrastructure and Water supervisor Works Manager
Settling Tanks	Replace failing settling tanks	New 100kl panel tank installed to replace the 2 20,000lt poly tanks	completed	Water Officer Town Infrastructure and Water supervisor Works Manager
Water for Parks	Run new raw water irrigation lines to irrigation systems at several of council's parks	Reduction in treated drinking water usage, improvement to back up and emergency systems	Commenced due for completion early 2025	Water Officer Town Infrastructure and Water supervisor Works Manager

## **8 DWQMP audit findings**

The audit findings were completed and reported in 2023 annual report

Next Audited Report due 2024.