

Drinking Water Quality Management Plan Report

Mareeba Shire Council

SPID: **557**

Financial year to which report relates:

2019-20

65 Rankin Street
PO Box 154
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Glossary of terms

ADWG 2004	Australian Drinking Water Guidelines (2004). Published by the National Health and Medical Research Council of Australia
ADWG 2011	Australian Drinking Water Guidelines (2011). Published by the National Health and Medical Research Council of Australia
<i>E. coli</i>	<i>Escherichia coli</i> , a bacterium which is considered to indicate the presence of faecal contamination and therefore potential health risk
HACCP	Hazard Analysis and Critical Control Points certification for protecting drinking water quality
mg/L	Milligrams per litre
MSC	Mareeba Shire Council
NTU	Nephelometric Turbidity Units
MPN/100mL	Most probable number per 100 millilitres
CFU/100mL	Colony forming units per 100 millilitres
<	Less than
>	Greater than

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1 Introduction

This is the Drinking Water Quality Management Plan (DWQMP) report for Mareeba Shire Council (MSC) for the financial year 2019–2020.

MSC is a registered service provider with identification (SPID) number 557. MSC is operating under an approved DWQMP 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 DWQMP report includes:

- ◆ the activities undertaken over the financial year in operating all MSC's drinking water services
- ◆ drinking water quality summary
- ◆ summary of the MSC Water and Waste Department's performance in implementing the MSC approved DWQMP

This report is submitted to the Regulator to fulfil MSC's regulatory requirement and is also made available to MSC's customers through its website or for inspection upon request at Council's Rankine St office.

2 Summary of scheme/s operated

Table 1 – Summary of schemes

Scheme	Water Source	Treatment processes	Treatment capacity ¹
Chillagoe	Bores (3)	Filtration and chlorination	0.5 ML/d
Dimbulah	SunWater Irrigation Channel	Filtration and chlorination	1.2 ML/d
Mareeba	Barron River (SunWater Supplemented)	Coagulation, flocculation, clarification, filtration and chlorination	14.5 ML/d
Kuranda	Barron River (SunWater Supplemented)	Coagulation, flocculation, clarification, filtration and chlorination	2.0 ML/d

3 DWQMP implementation

Water and Wastewater staff met monthly to discuss all aspects of the supply and delivery of drinking water. The meetings were chaired by the Manager Water and Waste.

During the reporting period a trainee treatment plant operator was recruited. In the induction process the trainee operator was introduced to the DWQMP and his ongoing role in implementing it.

The actions undertaken to implement the DWQMP improvement program are summarised below.

¹ Maximum sustainable capacity

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	Component	Mitigated Risk	Improvement Actions	Original Target Date ²	Status and Revised Target Date	Responsible Officer / Position
Chillagoe	Storage and Reticulation Hazards	Moderate	Replace town water reservoirs with 500 kL reinforced concrete reservoir.	2020	2022	W&W Manager
Chillagoe	Storage and Reticulation Hazards	Moderate	Installing a pressure leakage management system on proposed lines. W&W Engineer to analyse and advise W&W Manager.	2020	2022	W&W Engineer
Dimbulah	Storage and Reticulation Hazards	Moderate	Installing a pressure leakage management system on proposed lines. W&W Engineer to analyse and advise W&W Manager.	2020	2022	W&W Engineer
Kuranda	Storage and Reticulation Hazards	Moderate	Installing a pressure leakage management system on proposed lines. W&W Engineer to analyse and advise W&W Manager.	2020	2022	W&W Engineer
Kuranda	Storage and Reticulation Hazards	Moderate	Warril Drive New Water Main and Booster - Non-Discretionary. Required to sustain services.	2020	2022	W&W Manager
Kuranda	Storage and Reticulation Hazards	Moderate	Warril Drive Water Main Replacement from the Kennedy Highway to the original pump station.	2020	2022	W&W Manager
Mareeba	Storage and Reticulation Hazards	Moderate	Analyse network model and perform pressure and flow tests.	2018	2022	W&W Engineer
Mareeba	Storage and Reticulation Hazards	Moderate	Installing a pressure leakage management system on proposed lines. W&W Engineer to analyse and advise W&W Manager.	2020	2022	W&W Engineer
Mareeba	Storage and Reticulation Hazards	Very High	Install pressure booster system at Mareeba WTP to service the southern area.	2021	2022	W&W Manager
Shire Wide	Treatment Plant Hazards	Moderate	Streaming current coming online.	2021	2022	W&W Manager
Shire Wide	Treatment Plant Hazards	Moderate	Possible SCADA integration.	2021	2022	W&W Manager
Shire Wide	System Wide Hazards	Moderate	Engage Cyber Security Consultant to audit MSC system(s). NHP doing conducting posture survey.	2021	2022	W&W Manager
Shire Wide	System Wide Hazards	Very High	Assess training needs through internal audits and general feedback: training, multiskilling, job swapping, traineeships & relief staff.	Ongoing	Ongoing	W&W Manager

4 Verification monitoring - water quality information and summary

This section discusses the compliance with the water quality criteria.

Table 3 displays all the tested parameters for the previous water year (1 Jul 2019 - 30 Jun 2020) that have a maximum permissible Health Guideline value listed in Table 10.6 of the ADWG (Ver. 3.5).

There were no exceedances.

Table 3 – Drinking water quality performance - verification monitoring

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Chillagoe	Acephate	2	0	8	µg/L	0				<0.5	CRC
Chillagoe	Aldrin	2	0	0.3	µg/L	0				<0.01	CRC
Chillagoe	Antimony	2	0	0.003	mg/L	0				<0.001	CRC

² Financial year beginning

³ That has a set health value in the ADWG

⁴ No. of samples required to be collected (as per the approved DWQMP): this number was not actually set for each parameter.

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Chillagoe	Arsenic	2	2	0.01	mg/L	0	0.0024	0.0028	0.0026	<0.001	CRC
Chillagoe	Azinphos Methyl	1	0	30	µg/L	0				<0.02	CRC
Chillagoe	Barium	2	2	2	mg/L	0	0.065	0.075	0.07	<0.001	CRC
Chillagoe	Beryllium	2	0	0.06	mg/L	0				<0.001	CRC
Chillagoe	Boron	2	0	4	mg/L	0				<0.05	CRC
Chillagoe	Bromophos-ethyl	2	0	10	µg/L	0				<0.1	CRC
Chillagoe	Cadmium	2	2	0.002	mg/L	0	0.0001	0.0001	0.0001	<0.0001	CRC
Chillagoe	Carbophenothion	1	0	0.5	µg/L	0				<0.02	CRC
Chillagoe	Chlorfenvinphos (Z)	1	0	2	µg/L	0				<0.02	CRC
Chillagoe	Chlorpyrifos	2	0	10	µg/L	0				<0.02	CRC
Chillagoe	Chromium	2	1	0.05	mg/L	0	0.0002	0.0002	0.0002	<0.001	CRC
Chillagoe	Copper	2	2	2	mg/L	0	0.021	0.026	0.0235	<0.001	CRC
Chillagoe	DDT (total)	1	0	9	µg/L	0				<0.01	CRC
Chillagoe	Diazinon	2	0	4	µg/L	0				<0.01	CRC
Chillagoe	Dichlorvos	2	0	5	µg/L	0				<0.2	CRC
Chillagoe	Dieldrin	2	0	0.3	µg/L	0				<0.01	CRC
Chillagoe	Dimethoate	2	0	7	µg/L	0				<0.02	CRC
Chillagoe	Disulfoton	2	0	4	µg/L	0				<0.05	CRC
Chillagoe	E. coli	2	0	1	CFU/100mL	0				<1	CRC
Chillagoe	Endosulfan (sum)	2	0	20	µg/L	0				<0.01	CRC
Chillagoe	Ethion	2	0	4	µg/L	0				<0.02	CRC
Chillagoe	Ethoprophos	2	0	1	µg/L	0				<0.01	CRC
Chillagoe	Fenamiphos	2	0	0.5	µg/L	0				<0.01	CRC
Chillagoe	Fenitrothion	2	0	7	µg/L	0				<2	CRC
Chillagoe	Fensulfothion	2	0	10	µg/L	0				<0.01	CRC
Chillagoe	Fenthion	2	0	7	µg/L	0				<0.05	CRC
Chillagoe	Fluoride	2	2	1.5	mg/L	0	0.12	0.13	0.125	<0.02	CRC
Chillagoe	Formothion	2	0	50	µg/L	0				<20	CRC
Chillagoe	Free Chlorine	2	2	5	mg/L	0	0.79	1.1	0.945	<0.01	CRC
Chillagoe	Heptachlor	2	0	0.3	µg/L	0				<0.005	CRC
Chillagoe	Heptachlor epoxide	2	0	0.3	µg/L	0				<0.01	CRC
Chillagoe	Lead	2	2	0.01	mg/L	0	0.0017	0.0033	0.0025	<0.001	CRC
Chillagoe	Malathion	2	0	70	µg/L	0				<0.02	CRC
Chillagoe	Manganese	2	1	0.5	mg/L	0	0.0003	0.0003	0.0003	<0.001	CRC
Chillagoe	Mercury	2	0	1	µg/L	0				<0.06	CRC
Chillagoe	Methidathion	2	0	6	µg/L	0				<0.02	CRC
Chillagoe	Methoxychlor	2	0	300	µg/L	0				<0.01	CRC
Chillagoe	Mevinphos	2	0	5	µg/L	0				<0.02	CRC
Chillagoe	Molybdenum	2	0	0.05	mg/L	0				<0.0005	CRC

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Chillagoe	Monocrotophos	2	0	2	µg/L	0				<0.02	CRC
Chillagoe	Nickel	2	0	0.02	mg/L	0				<0.0005	CRC
Chillagoe	Omethoate	2	0	1	µg/L	0				<0.01	CRC
Chillagoe	Parathion	2	0	20	µg/L	0				<0.2	CRC
Chillagoe	Parathion-methyl	2	0	0.7	µg/L	0				<0.5	CRC
Chillagoe	Profenofos	2	0	0.3	µg/L	0				<0.01	CRC
Chillagoe	Pyrazophos	2	0	20	µg/L	0				<0.1	CRC
Chillagoe	Selenium	2	0	0.01	mg/L	0				<0.002	CRC
Chillagoe	Silver	2	0	0.1	mg/L	0				<0.0002	CRC
Chillagoe	Sulprofos	2	0	10	µg/L	0				<0.05	CRC
Chillagoe	Temephos	2	0	400	µg/L	0				<0.02	CRC
Chillagoe	Terbufos	2	0	0.9	µg/L	0				<0.01	CRC
Chillagoe	Tetrachlorvinphos	2	0	100	µg/L	0				<0.01	CRC
Chillagoe	Thiometon	2	0	4	µg/L	0				<0.5	CRC
Chillagoe	Total Chlordane (sum)	2	0	2	µg/L	0				<0.01	CRC
Chillagoe	Trichlorfon	2	0	7	µg/L	0				<0.02	CRC
Chillagoe	Uranium	2	2	0.017	mg/L	0	0.001	0.0011	0.00105	<0.0001	CRC
Dimbulah	Acephate	2	0	8	µg/L	0				<0.5	CRC
Dimbulah	Aldrin	2	0	0.3	µg/L	0				<0.01	CRC
Dimbulah	Antimony	2	0	0.003	mg/L	0				<0.001	CRC
Dimbulah	Arsenic	2	2	0.01	mg/L	0	0.0006	0.001	0.0008	<0.001	CRC
Dimbulah	Azinphos Methyl	1	0	30	µg/L	0				<0.02	CRC
Dimbulah	Barium	2	2	2	mg/L	0	0.007	0.014	0.0105	<0.001	CRC
Dimbulah	Beryllium	2	0	0.06	mg/L	0				<0.001	CRC
Dimbulah	Boron	2	0	4	mg/L	0				<0.05	CRC
Dimbulah	Bromophos-ethyl	2	0	10	µg/L	0				<0.1	CRC
Dimbulah	Cadmium	2	0	0.002	mg/L	0				<0.0001	CRC
Dimbulah	Carbophenothion	1	0	0.5	µg/L	0				<0.02	CRC
Dimbulah	Chlorfenvinphos (Z)	1	0	2	µg/L	0				<0.02	CRC
Dimbulah	Chlorpyrifos	2	0	10	µg/L	0				<0.02	CRC
Dimbulah	Chromium	2	0	0.05	mg/L	0				<0.001	CRC
Dimbulah	Copper	2	2	2	mg/L	0	0.002	0.006	0.004	<0.001	CRC
Dimbulah	DDT (total)	1	0	9	µg/L	0				<0.01	CRC
Dimbulah	Diazinon	2	0	4	µg/L	0				<0.01	CRC
Dimbulah	Dichlorvos	2	0	5	µg/L	0				<0.2	CRC
Dimbulah	Dieldrin	2	0	0.3	µg/L	0				<0.01	CRC
Dimbulah	Dimethoate	2	0	7	µg/L	0				<0.02	CRC
Dimbulah	Disulfoton	2	0	4	µg/L	0				<0.05	CRC
Dimbulah	E. coli	2	0	1	CFU/100mL	0				<1	CRC

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Dimbulah	Endosulfan (sum)	2	0	20	µg/L	0				<0.01	CRC
Dimbulah	Ethion	2	0	4	µg/L	0				<0.02	CRC
Dimbulah	Ethoprophos	2	0	1	µg/L	0				<0.01	CRC
Dimbulah	Fenamiphos	2	0	0.5	µg/L	0				<0.01	CRC
Dimbulah	Fenitrothion	2	0	7	µg/L	0				<2	CRC
Dimbulah	Fensulfothion	2	0	10	µg/L	0				<0.01	CRC
Dimbulah	Fenthion	2	0	7	µg/L	0				<0.05	CRC
Dimbulah	Fluoride	2	2	1.5	mg/L	0	0.03	0.16	0.095	<0.02	CRC
Dimbulah	Formothion	2	0	50	µg/L	0				<20	CRC
Dimbulah	Free Chlorine	2	2	5	mg/L	0	0.82	1.1	0.96	<0.01	CRC
Dimbulah	Heptachlor	2	0	0.3	µg/L	0				<0.005	CRC
Dimbulah	Heptachlor epoxide	2	0	0.3	µg/L	0				<0.01	CRC
Dimbulah	Lead	2	0	0.01	mg/L	0				<0.001	CRC
Dimbulah	Malathion	2	0	70	µg/L	0				<0.02	CRC
Dimbulah	Manganese	2	2	0.5	mg/L	0	0.0004	0.0009	0.00065	<0.001	CRC
Dimbulah	Mercury	2	0	1	µg/L	0				<0.06	CRC
Dimbulah	Methidathion	2	0	6	µg/L	0				<0.02	CRC
Dimbulah	Methoxychlor	2	0	300	µg/L	0				<0.01	CRC
Dimbulah	Mevinphos	2	0	5	µg/L	0				<0.02	CRC
Dimbulah	Molybdenum	2	0	0.05	mg/L	0				<0.0005	CRC
Dimbulah	Monocrotophos	2	0	2	µg/L	0				<0.02	CRC
Dimbulah	Nickel	2	1	0.02	mg/L	0	0.0048	0.0048	0.0048	<0.0005	CRC
Dimbulah	Omethoate	2	0	1	µg/L	0				<0.01	CRC
Dimbulah	Parathion	2	0	20	µg/L	0				<0.2	CRC
Dimbulah	Parathion-methyl	2	0	0.7	µg/L	0				<0.5	CRC
Dimbulah	Profenofos	2	0	0.3	µg/L	0				<0.01	CRC
Dimbulah	Pyrazophos	2	0	20	µg/L	0				<0.1	CRC
Dimbulah	Selenium	2	0	0.01	mg/L	0				<0.002	CRC
Dimbulah	Silver	2	0	0.1	mg/L	0				<0.0002	CRC
Dimbulah	Sulprofos	2	0	10	µg/L	0				<0.05	CRC
Dimbulah	Temephos	2	0	400	µg/L	0				<0.02	CRC
Dimbulah	Terbufos	2	0	0.9	µg/L	0				<0.01	CRC
Dimbulah	Tetrachlorvinphos	2	0	100	µg/L	0				<0.01	CRC
Dimbulah	Thiometon	2	0	4	µg/L	0				<0.5	CRC
Dimbulah	Total Chlordane (sum)	2	0	2	µg/L	0				<0.01	CRC
Dimbulah	Trichlorfon	2	0	7	µg/L	0				<0.02	CRC
Dimbulah	Uranium	2	0	0.017	mg/L	0				<0.0001	CRC
Mareeba	Acephate	2	0	8	µg/L	0				<0.5	CRC
Mareeba	Aldrin	2	0	0.3	µg/L	0				<0.01	CRC

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Mareeba	Antimony	2	0	0.003	mg/L	0				<0.001	CRC
Mareeba	Arsenic	2	2	0.01	mg/L	0	0.0003	0.0006	0.00045	<0.001	CRC
Mareeba	Azinphos Methyl	1	0	30	µg/L	0				<0.02	CRC
Mareeba	Barium	2	2	2	mg/L	0	0.008	0.011	0.0095	<0.001	CRC
Mareeba	Beryllium	2	0	0.06	mg/L	0				<0.001	CRC
Mareeba	Boron	2	0	4	mg/L	0				<0.05	CRC
Mareeba	Bromophos-ethyl	2	0	10	µg/L	0				<0.1	CRC
Mareeba	Cadmium	2	0	0.002	mg/L	0				<0.0001	CRC
Mareeba	Carbophenothion	1	0	0.5	µg/L	0				<0.02	CRC
Mareeba	Chlorfenvinphos (Z)	1	0	2	µg/L	0				<0.02	CRC
Mareeba	Chlorpyrifos	2	0	10	µg/L	0				<0.02	CRC
Mareeba	Chromium	2	0	0.05	mg/L	0				<0.001	CRC
Mareeba	Copper	2	2	2	mg/L	0	0.003	0.005	0.004	<0.001	CRC
Mareeba	DDT (total)	1	0	9	µg/L	0				<0.01	CRC
Mareeba	Diazinon	2	0	4	µg/L	0				<0.01	CRC
Mareeba	Dichlorvos	2	0	5	µg/L	0				<0.2	CRC
Mareeba	Dieldrin	2	0	0.3	µg/L	0				<0.01	CRC
Mareeba	Dimethoate	2	0	7	µg/L	0				<0.02	CRC
Mareeba	Disulfoton	2	0	4	µg/L	0				<0.05	CRC
Mareeba	E. coli	2	0	1	CFU/100mL	0				<1	CRC
Mareeba	Endosulfan (sum)	2	0	20	µg/L	0				<0.01	CRC
Mareeba	Ethion	2	0	4	µg/L	0				<0.02	CRC
Mareeba	Ethoprophos	2	0	1	µg/L	0				<0.01	CRC
Mareeba	Fenamiphos	2	0	0.5	µg/L	0				<0.01	CRC
Mareeba	Fenitrothion	2	0	7	µg/L	0				<2	CRC
Mareeba	Fensulfothion	2	0	10	µg/L	0				<0.01	CRC
Mareeba	Fenthion	2	0	7	µg/L	0				<0.05	CRC
Mareeba	Fluoride	2	2	1.5	mg/L	0	0.03	0.08	0.055	<0.02	CRC
Mareeba	Formothion	2	0	50	µg/L	0				<20	CRC
Mareeba	Free Chlorine	2	2	5	mg/L	0	1.2	1.5	1.35	<0.01	CRC
Mareeba	Heptachlor	2	0	0.3	µg/L	0				<0.005	CRC
Mareeba	Heptachlor epoxide	2	0	0.3	µg/L	0				<0.01	CRC
Mareeba	Lead	2	0	0.01	mg/L	0				<0.001	CRC
Mareeba	Malathion	2	0	70	µg/L	0				<0.02	CRC
Mareeba	Manganese	2	2	0.5	mg/L	0	0.0002	0.0002	0.0002	<0.001	CRC
Mareeba	Mercury	2	0	1	µg/L	0				<0.06	CRC
Mareeba	Methidathion	2	0	6	µg/L	0				<0.02	CRC
Mareeba	Methoxychlor	2	0	300	µg/L	0				<0.01	CRC
Mareeba	Mevinphos	2	0	5	µg/L	0				<0.02	CRC

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Mareeba	Molybdenum	2	0	0.05	mg/L	0				<0.0005	CRC
Mareeba	Monocrotophos	2	0	2	µg/L	0				<0.02	CRC
Mareeba	Nickel	2	0	0.02	mg/L	0				<0.0005	CRC
Mareeba	Omethoate	2	0	1	µg/L	0				<0.01	CRC
Mareeba	Parathion	2	0	20	µg/L	0				<0.2	CRC
Mareeba	Parathion-methyl	2	0	0.7	µg/L	0				<0.5	CRC
Mareeba	Profenofos	2	0	0.3	µg/L	0				<0.01	CRC
Mareeba	Pyrazophos	2	0	20	µg/L	0				<0.1	CRC
Mareeba	Selenium	2	0	0.01	mg/L	0				<0.002	CRC
Mareeba	Silver	2	0	0.1	mg/L	0				<0.0002	CRC
Mareeba	Sulprofos	2	0	10	µg/L	0				<0.05	CRC
Mareeba	Temephos	2	0	400	µg/L	0				<0.02	CRC
Mareeba	Terbufos	2	0	0.9	µg/L	0				<0.01	CRC
Mareeba	Tetrachlorvinphos	2	0	100	µg/L	0				<0.01	CRC
Mareeba	Thiometon	2	0	4	µg/L	0				<0.5	CRC
Mareeba	Total Chlordane (sum)	2	0	2	µg/L	0				<0.01	CRC
Mareeba	Trichlorfon	2	0	7	µg/L	0				<0.02	CRC
Mareeba	Uranium	2	0	0.017	mg/L	0				<0.0001	CRC
Kuranda	Acephate	2	0	8	µg/L	0				<0.5	CRC
Kuranda	Aldrin	2	0	0.3	µg/L	0				<0.01	CRC
Kuranda	Antimony	2	0	0.003	mg/L	0				<0.001	CRC
Kuranda	Arsenic	2	2	0.01	mg/L	0	0.0003	0.0004	0.00035	<0.001	CRC
Kuranda	Azinphos Methyl	1	0	30	µg/L	0				<0.02	CRC
Kuranda	Barium	2	2	2	mg/L	0	0.009	0.017	0.013	<0.001	CRC
Kuranda	Beryllium	2	0	0.06	mg/L	0				<0.001	CRC
Kuranda	Boron	2	0	4	mg/L	0				<0.05	CRC
Kuranda	Bromophos-ethyl	2	0	10	µg/L	0				<0.1	CRC
Kuranda	Cadmium	2	0	0.002	mg/L	0				<0.0001	CRC
Kuranda	Carbophenothion	1	0	0.5	µg/L	0				<0.02	CRC
Kuranda	Chlorfenvinphos (Z)	1	0	2	µg/L	0				<0.02	CRC
Kuranda	Chlorpyrifos	2	0	10	µg/L	0				<0.02	CRC
Kuranda	Chromium	2	1	0.05	mg/L	0	0.0003	0.0003	0.0003	<0.001	CRC
Kuranda	Copper	2	2	2	mg/L	0	0.004	0.01	0.007	<0.001	CRC
Kuranda	DDT (total)	1	0	9	µg/L	0				<0.01	CRC
Kuranda	Diazinon	2	0	4	µg/L	0				<0.01	CRC
Kuranda	Dichlorvos	2	0	5	µg/L	0				<0.2	CRC
Kuranda	Dieldrin	2	0	0.3	µg/L	0				<0.01	CRC
Kuranda	Dimethoate	2	0	7	µg/L	0				<0.02	CRC
Kuranda	Disulfoton	2	0	4	µg/L	0				<0.05	CRC

Scheme name	Parameter ³	No. of Samples ⁴	No. of Samples Detected	ADWG Health Guideline Value	Units	No. of Non-Compliant Samples	Min	Max	Average (Mean)	Limit of Reporting	Laboratory
Kuranda	E. coli	2	0	1	CFU/100mL	0				<1	CRC
Kuranda	Endosulfan (sum)	2	0	20	µg/L	0				<0.01	CRC
Kuranda	Ethion	2	0	4	µg/L	0				<0.02	CRC
Kuranda	Ethoprophos	2	0	1	µg/L	0				<0.01	CRC
Kuranda	Fenamiphos	2	0	0.5	µg/L	0				<0.01	CRC
Kuranda	Fenitrothion	2	0	7	µg/L	0				<2	CRC
Kuranda	Fensulfothion	2	0	10	µg/L	0				<0.01	CRC
Kuranda	Fenthion	2	0	7	µg/L	0				<0.05	CRC
Kuranda	Fluoride	2	2	1.5	mg/L	0	0.04	0.05	0.045	<0.02	CRC
Kuranda	Formothion	2	0	50	µg/L	0				<20	CRC
Kuranda	Free Chlorine	2	2	5	mg/L	0	0.92	2.1	1.51	<0.01	CRC
Kuranda	Heptachlor	2	0	0.3	µg/L	0				<0.005	CRC
Kuranda	Heptachlor epoxide	2	0	0.3	µg/L	0				<0.01	CRC
Kuranda	Lead	2	0	0.01	mg/L	0				<0.001	CRC
Kuranda	Malathion	2	0	70	µg/L	0				<0.02	CRC
Kuranda	Manganese	2	2	0.5	mg/L	0	0.0039	0.0114	0.00765	<0.001	CRC
Kuranda	Mercury	2	0	1	µg/L	0				<0.06	CRC
Kuranda	Methidathion	2	0	6	µg/L	0				<0.02	CRC
Kuranda	Methoxychlor	2	0	300	µg/L	0				<0.01	CRC
Kuranda	Mevinphos	2	0	5	µg/L	0				<0.02	CRC
Kuranda	Molybdenum	2	0	0.05	mg/L	0				<0.0005	CRC
Kuranda	Monocrotophos	2	0	2	µg/L	0				<0.02	CRC
Kuranda	Nickel	2	1	0.02	mg/L	0	0.0005	0.0005	0.0005	<0.0005	CRC
Kuranda	Omethoate	2	0	1	µg/L	0				<0.01	CRC
Kuranda	Parathion	2	0	20	µg/L	0				<0.2	CRC
Kuranda	Parathion-methyl	2	0	0.7	µg/L	0				<0.5	CRC
Kuranda	Profenofos	2	0	0.3	µg/L	0				<0.01	CRC
Kuranda	Pyrazophos	2	0	20	µg/L	0				<0.1	CRC
Kuranda	Selenium	2	0	0.01	mg/L	0				<0.002	CRC
Kuranda	Silver	2	0	0.1	mg/L	0				<0.0002	CRC
Kuranda	Sulprofos	2	0	10	µg/L	0				<0.05	CRC
Kuranda	Temephos	2	0	400	µg/L	0				<0.02	CRC
Kuranda	Terbufos	2	0	0.9	µg/L	0				<0.01	CRC
Kuranda	Tetrachlorvinphos	2	0	100	µg/L	0				<0.01	CRC
Kuranda	Thiometon	2	0	4	µg/L	0				<0.5	CRC
Kuranda	Total Chlordane (sum)	2	0	2	µg/L	0				<0.01	CRC
Kuranda	Trichlorfon	2	0	7	µg/L	0				<0.02	CRC
Kuranda	Uranium	2	0	0.017	mg/L	0				<0.0001	CRC
TOTALS						0					

Table 4 – E. coli compliance with annual value

Drinking water scheme:		Chillagoe											
Year	2019 – 2020												
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
No. of samples collected	1	1	2	1	1	1	1	1	2	1	1	1	
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	14	14	14	14	14	14	14	14	14	14	14	14	
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0	
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Drinking water scheme:		Dimbulah											
Year	2019 – 2020												
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
No. of samples collected	5	4	5	5	4	4	5	4	5	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	55	54	54	54	54	54	54	54	54	55	54	54	
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0	
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Drinking water scheme:		Mareeba											
Year	2019 – 2020												
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
No. of samples collected	12	8	9	10	8	8	10	8	9	10	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	112	111	111	111	111	111	109	108	110	108	108	
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0	
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Drinking water scheme:		Kuranda											
Year	2019 – 2020												
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
No. of samples collected	10	8	9	9	8	8	9	8	9	10	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	108	106	106	105	105	105	104	104	104	106	104	104	
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0	
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

5 Incidents reported to the regulator

There were no incidents reported to the Regulator during the previous water year.

6 Customer complaints

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

Table 5 – Customer complaints about water quality

Scheme	High Pressure	Aerated	Dirty Water	Taste and Odour	No Water or Low Pressure	Totals
Chillagoe	0	0	0	0	0	0
Dimbulah	0	0	0	0	1	1
Mareeba	3	2	2	6	48	61
Kuranda	0	2	2	2	15	21
Totals	3	4	4	8	64	83

NOTES: The 'No Water' complaints generally relate to main breaks which were all attended to within the time stated in the MSC Customer Service Standards.

7 DWQMP review outcomes

The DWQMP was reviewed, updated and forwarded to the Water Supply Regulator for consideration in June 2020. The Information Notice approving the amended DWQMP was received from the regulator 21 September 2020.

8 DWQMP audit

The next scheduled regular audit of the DWQMP is 30 June 2021.

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