

# Drinking Water Quality Management Plan (DWQMP) report

1<sup>st</sup> JULY 2014 TO 30<sup>th</sup> JUNE 2015

## Woorabinda Aboriginal Shire Council

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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
NTU	Nephelometric Turbidity Units
MPN/100mL	Most probable number per 100 millilitres
CFU/100mL	Colony forming units per 100 millilitres
<	Less than
>	Greater than

## 1. Introduction

This report documents the performance of Woorabinda Aboriginal Shire Council drinking water service with respect to water quality and performance in implementing the actions detailed in the drinking water quality management plan (DWQMP) as required under the *Water Supply (Safety and Reliability) Act 2008* (the Act).

The report assists the Regulator to determine whether the approved DWQMP and any approval conditions have been complied with and provides a mechanism for providers to report publicly on their performance in managing drinking water quality.

This template has been prepared in accordance with the *Water Industry Regulatory Reform – drinking water quality management plan report factsheet* published by the Department of Energy and Water Supply, Queensland, accessible at [www.dews.qld.gov.au](http://www.dews.qld.gov.au).

## 2. Overview of Operations

The Woorabinda Aboriginal Shire Council Water Reticulation sources water from the Dawson River Scheme and 3 bores from the Blackboy Bore Fields. The Mimosa Creek Supply was introduced in May 2015 with minimal success due to water supply issues.

The treatment of the raw water supply comprises of PH correction, flocculation, settling, multimedia filtration and carbon filtration. Water is disinfected before reticulation with Sodium Hypochlorite. The entire process is monitored electronically and manually by operators to protect public health by the provision of safe drinking water supply.

## 3. Actions taken to implement the DWQMP

### **Progress in implementing the risk management improvement program.**

The Woorabinda Aboriginal Shire Council DWQMP was created on the 2<sup>nd</sup> of May 2013 and was approved by the Queensland Water Regulator on the 14<sup>th</sup> of October 2013

The DWQMP has been developed to meet the requirements of the Water Supply (Safety and Reliability) Act 2008 and the subsequent Drinking Water Quality Management Plan Guideline, September 2010. The Act is administered by the Office of the Water Supply Regulator who oversees Council's compliance with the drinking water quality management plan, and the water quality monitoring and reporting requirements against drinking water quality standards.

To Ensure quality of water delivered to the township of Woorabinda, operators conduct daily testing of the treatment plant and monthly tests of the community.

Independent Laboratory tests are conducted monthly along with independent maintenance visits by qualified technician. These visits are recorded and reported to the council supervisors on the condition of the treatment process and operator performance.

### **Revisions made to the operational monitoring program to assist in maintaining the compliance with water quality criteria<sup>1</sup> in verification monitoring.**

*NO REVISIONS HAVE BEEN MADE.*

### **Amendments made to the DWQMP**

*NO ADMENDMENTS HAVE BEEN REQUIRED*

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<sup>1</sup> Refer to *Water Quality and Reporting Guideline for a Drinking Water Service* for the water quality criteria for drinking water.

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

Refer Appendix A of this document for summarised analysis results.

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

No notifiable incidents occurred during this period.

## 6.

This financial year there were zero instances where the Regulator was notified under sections 102 or 102A of the Act.

### **Non-compliances with the water quality criteria and corrective and preventive actions undertaken.**

Not applicable

### **Prescribed incidents or Events reported to the Regulator and corrective and preventive actions undertaken.**

Not applicable.

## 7. Customer complaints related to water quality

Woorabinda Aboriginal Shire Council is required to report on the number of complaints, general details of complaints, and the responses undertaken.

Throughout the 2014/15 financial year the following complaints about water quality were received:

**Table 1 - complaints about water quality, (including per 1000 customers)**

	Suspected Illness	Discoloured water	Taste and odour	Total
Scheme 1	0	0	0	0
Total	0	0	0	0

### **Suspected Illness**

Complaints are sometimes received from customers who suspect their water may be associated with an illness they are experiencing. Woorabinda Aboriginal Shire Council investigates each complaint relating to alleged illness from our water quality, typically by testing the customers tap and closest reticulation sampling point for the presence of *E. coli*.

During 2014/15 financial year, there were no confirmed cases of illness arising from the water supply system.

## 8. Findings and recommendations of the DWQMP auditor

Woorabinda Aboriginal Shire Council will arrange to conduct an audit of the DWQMP during the 2015 year, covering the period from 2013 - 2015. The purpose of the audit is to verify the accuracy of the monitoring and performance data provided to the Regulator; assess compliance with the DWQMP; and to assess the relevance of the DWQMP in relation to the service provided. A summary of, and recommendations from, the Audit will be included in the 2015/16 DWQMP report.

## 9. Outcome of the review of the DWQMP and how issues raised have been addressed

The next internal review of the DWQMP is due before October 2015

**Hazards and hazardous events that affected the quality of drinking water during the year and which were not addressed in the DWQMP.**

### **Woorabinda Water shortage December 2014**

On 18<sup>th</sup> of December 2014 it was found that the town water supply was affected by a power outage due to an electrical storm which had blown the treatment plant main power pole fuses along with cutting power to the whole district. Ergon replaced the fuses, but weren't able to restore the power for 4 days.

The prolonged power outage meant that the water supply got to critical levels resulting in Council bringing in trucked water from outside the community to make safe drinking water available for the community.

Once power was restored the treatment plant was able to make sufficient safe water to for the community. However, a plastic bottle from inside one of the two reservoirs became wedged in outlet pipeline. This resulted in another water shortage until the bottle was located and removed.

The review of these events pointed out two issues which needed to be addressed:

1. An alternative power source will need to be available i.e. backup generator. This will allow the treatment plant to operate during prolonged power outage and still safe potable water for the community.
2. All water and sewage facilities are required to be locked and checked regularly. The presence of the bottle in the reservoir meant that these were not secured sufficiently which meant there was a safety risk of persons contaminating the community water supply. New locks were installed on all reservoirs.

## Appendix A – Summary of compliance with water quality criteria

The results from the verification monitoring program have been compared against the levels of the water quality criteria specified by the Regulator in the *Water Quality and Reporting Guideline for a Drinking Water Service*.

The reported statistics do not include results derived from repeat samples, or from emergency or investigative samples undertaken in response to an elevated result.

The following testing results were verified by Queensland Government Forensics & Scientific Services monthly.

**Table 2 - Verification monitoring results**

Scheme name	Scheme component	Parameter	Units	Frequency of sampling	Total No. samples collected	No. of samples in which parameter was detected	No. of samples exceeding water quality criteria	Min	Max	Average (Mean)	Limit of reporting	Laboratory name
Woorabinda	Reticulation State School	Coliforms	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		E.Coli	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		PH		monthly	3	3	0	6.0	8.5		0.1	QF & SS
		Free Chlorine	mg/L	monthly	3	3	0	0.2	1.5	0.95	0.1	QF & SS
	Reticulation Hospital	Coliforms	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		E.Coli	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		PH		monthly	3	3	0	6.0	8.5		0.1	QF & SS
		Free Chlorine	mg/L	monthly	3	3	0	0.2	1.5	0.95	0.1	QF & SS
	Reticulation Water Reservoir	Coliforms	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		E.Coli	mpn/100mL	monthly	3	0	0	0	0	0	0	QF & SS
		PH		monthly	3	3	0	6.0	8.5		0.1	QF & SS
		Free Chlorine	mg/L	monthly	3	3	0	0.2	1.5	0.95	0.1	QF & SS

**Table 3 - Reticulation *E. coli* verification monitoring**

Drinking water scheme: Woorabinda Aboriginal Shire Council

Year	2014/15											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	3	3	3	3	3	3	3	3	3	3	3	3
No. of samples collected in which <i>E. coli</i> 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	3	3	3	3	3	3	3	3	3	3	3	3
No. of failures for previous 12 month period	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
% 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%
Compliance with 98% annual value	yes	yes	yes	ye	yes	yes	yes	yes	yes	yes	yes	yes

**CALCULATE PERCENTAGE USING A TWELVE (12) MONTH 'ROLLING' ANNUAL VALUE**

The *Public Health Regulation 2005* (the regulation) requires that 98 per cent of samples taken in a 12 month period should contain no *E. Coli*. This requirement is referred to as the 'annual value' in Schedule 3A of the regulation.

This requirement comes into effect once you have 12 months data and should be assessed every month based on the previous 12 months data (so that it is a 'rolling' assessment).