Drinking Water Quality Management Plan (DWQMP) report

2015-16

Maranoa Regional Council

SPID: 494

Cnr Bungil & Quintin Streets
Roma QLD 4455
1300 007 662
council@maranoa.qld.gov.au

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
E. coli	*Escherichia coli*, 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 Maranoa Regional Council's 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.

2. Actions taken to implement the DWQMP

Operational limits have been set and are monitored by field crews. Verification monitoring is also carried out by our laboratory staff on a routine basis. Results that are out of operational limits are referred to supervisors for corrective action.

Progress in implementing the risk management improvement program

Refer to the Appendices for a summary of progress in implementing each of the Improvement Program actions.

Key Improvement items are tagged for capital upgrade consideration each financial year, or applied for when suitable external funding becomes available. Operational improvements are conducted within existing operational budgets based on their priority.

Revisions made to the operational monitoring program to assist in maintaining the compliance with water quality criteria[1] in verification monitoring.

The current approved plan is in effect with copies dispatched to all operational staff, and regular discussion with field staff to make them aware of the requirements under the plan.

Amendments made to the DWQMP

An informal internal review of the plan was undertaken after a change in the departments Manager. The new Manager was brought up to speed with the current plan and the improvement items required to continually improve the networks.

This year the only amendments proposed to be made to the plan involve updating the organizational structure, and updating the infrastructure maps of Roma and Injune following upgrades in each town.

3. Compliance with water quality criteria for drinking water

The water quality criteria mean health guideline values in the most current Australian Drinking Water Guidelines, as well as the standards in the Public Health Regulation 2005.

Amby

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	48	0	0
coliforms	MPN/100mL	N/A	48	N/A	
pH	pH	6.5 – 8.5	33		9.36
Chlorine (Free)	mg/L	< 5.0	33	0	3.00
Chlorine (Total)	mg/L	< 5.0	34	0	3.30

Injune

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	98	0	0
coliforms	MPN/100mL	N/A	98	N/A	
pH	pH	6.5 – 8.5	84		9.59
Chlorine (Free)	mg/L	< 5.0	56	0	2.70
Chlorine (Total)	mg/L	< 5.0	56	0	2.80

Jackson

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	24	0	0
coliforms	MPN/100mL	N/A	24	N/A	
pH	pH	6.5 – 8.5	22		9.51
Chlorine (Free)	mg/L	< 5.0	24	0	0.08
Chlorine (Total)	mg/L	< 5.0	24	0	0.32

Mitchell

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	106	0	0
coliforms	MPN/100mL	N/A	106	N/A	
pH	pH	6.5 – 8.5	70		9.96
Chlorine (Free)	mg/L	< 5.0	86	0	3.90
Chlorine (Total)	mg/L	< 5.0	86	0	4.20

Muckadilla

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	25	0	0
coliforms	MPN/100mL	N/A	25	N/A	
pH	pH	6.5 – 8.5	25		9.9
Chlorine (Free)	mg/L	< 5.0	9	0	0.73
Chlorine (Total)	mg/L	< 5.0	13	0	1.95

Mungallala

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	36	0	0
coliforms	MPN/100mL	N/A	36	N/A	
pH	pH	6.5 – 8.5	24		8.65
Chlorine (Free)	mg/L	< 5.0	25	0	2.4
Chlorine (Total)	mg/L	< 5.0	25	0	2.6

Roma

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	654	0	0
coliforms	MPN/100mL	N/A	654	N/A	
pH	pH	6.5 – 8.5	610		9.83
Chlorine (Free)	mg/L	< 5.0	626	0	3.2
Chlorine (Total)	mg/L	< 5.0	142	0	3.3

Surat

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	59	0	0
coliforms	MPN/100mL	N/A	59	N/A	
pH	pH	6.5 – 8.5	59		8.58
Chlorine (Free)	mg/L	< 5.0	59	0	2.2
Chlorine (Total)	mg/L	< 5.0	59	0	2.7

Wallumbilla

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	48	0	0
coliforms	MPN/100mL	N/A	48	N/A	
pH	pH	6.5 – 8.5	44		9.71
Chlorine (Free)	mg/L	< 5.0	48	0	1.42
Chlorine (Total)	mg/L	< 5.0	48	0	1.89

Yuleba

Parameter	Unit	Limit	No of Samples	No of Non-conforming	Max
E. coli	MPN/100mL	<1	48	0	0
coliforms	MPN/100mL	N/A	48	N/A	
pH	pH	6.5 – 8.5	44		9.69
Chlorine (Free)	mg/L	< 5.0	48	0	1.25
Chlorine (Total)	mg/L	< 5.0	48	0	1.38

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

This financial year there were no instances where the Regulator was notified under sections 102 or 102A of the Act.

5. Customer complaints related to water quality

Maranoa Regional Council is required to report on the number of complaints, general details of complaints, and the responses undertaken.

Throughout the year the following complaints about water quality were received:

Table 1 - complaints about water quality, (including per 1,000 customers)

# Complaints (# per 1,000 customers)	Suspected Illness	Discoloured water	Taste and odour	Total
Amby	0 (0.0)	0 (0.0)	0 (0.0)	**0 (0.0)**
Injune	1 (3.1)	1 (3.1)	0 (0.0)	**2 (6.3)**
Jackson	0 (0.0)	0 (0.0)	0 (0.0)	**0 (0.0)**
Mitchell	1 (1.1)	1 (1.1)	0 (0.0)	**2 (2.1)**
Muckadilla	0 (0.0)	0 (0.0)	0 (0.0)	**0 (0.0)**
Mungallala	1 (12.5)	0 (0.0)	1 (12.5)	**2 (25.0)**
Roma	2 (0.3)	13 (1.9)	24 (3.4)	**39 (5.6)**
Surat	0 (0.0)	1 (2.0)	0 (0.0)	**1 (2.0)**
Wallumbilla	0 (0.0)	0 (0.0)	0 (0.0)	**0 (0.0)**
Yuleba	0 (0.0)	0 (0.0)	1 (3.6)	**1 (3.6)**
Total	**5 (0.5)**	**16 (1.7)**	**26 (2.7)**	**47 (4.9)**

Suspected Illness

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

During 2015/16, there were no confirmed cases of illness arising from the water supply system. With the reports that were received being for skin irritation attributed to chlorine disinfection in the towns. Chlorine levels were tested and found to be within acceptable limits and could not be adjusted lower without compromising chlorine residual in further segments of the network.

Discoloured water

In 2015/16, 16 customer complaints were received from within the towns of Injune, Mitchell, Roma and Surat. As per standard procedure the areas were flushed to remove the dirty water and to achieve detectable chlorine residuals.

Air scouring of the Injune reticulation was undertaken in September 2015. The air scouring in Injune was communicated to the community, and involved the scouring of all mains, with the scouring continuing until water flowed clearly. All residents were advised of the reasons for the dirty water by way of letter box drop. Flushing of the mains will be undertaken on a regular basis by operations staff and air scouring will be conducted again on an as needed basis.

Taste and odour

The taste and odour complaints received are typically related to the smell of sulphur in the water supply bores. Once reported by customers or detected by our employees, Maranoa Regional Council investigates the issue to devise a prompt resolution, which may include flushing the reticulation. Investigation of each complaint found no public health risks, for either microbiological or chemical parameters. These odour complaints reoccur annually and coincide with hotter water being drawn up by the bores due to higher demand during summer.

6. Findings and recommendations of the DWQMP auditor

The next DWQMP audit is due before 25 June 2017. Currently working with the Qldwater - DASBAC group to align audit dates for Maranoa and neighbouring Council's.

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

A regular review of the DWQMP was conducted in July 2015. The purpose of the review was to ensure that the DWQMP remains relevant, having regard to the operation of the drinking water service. The review also allowed for the new Manager to be made aware of the current plan and the required improvement items. The review was conducted by:

- Graham Sweetlove – Manager (Water, Sewerage & Gas)
- Ben Godford – Coordinator (Water, Sewerage & Gas Projects, Compliance & Laboratory)
- Mathew Liston – Coordinator (Water, Sewerage & Gas Operations)

As a result of this review it was found that the organizational structure required updating as well as the infrastructure maps of Injune and Roma. Injune's water reticulation has been centralised in the last year, with all bores running dedicated to a 1 ML ground storage, where chlorine and acid are dosed. From here the water is delivered by booster pumps to town, with supply secured by an onsite generator. This has resolved long standing pressure issues in the town and made for easier dosing of chlorine and acid.

Appendix A – Summary of compliance with water quality criteria

Table 2 - Reticulation *E. coli* verification monitoring

Drinking water scheme: Amby

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	4	4	4	4	4	4	4	4	4	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	44	45	47	48	48	48	48	48	48	48	48	48
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Injune

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	8	8	16	8	8	8	8	8	8	7	7	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	90	91	100	101	102	103	104	106	103	102	101	98
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Jackson

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	2	2	2	2	2	2	2	2	2	2	2	2
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	30	29	28	27	26	25	24	24	24	24	24	24
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Mitchell

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	9	9	9	8	10	9	7	9	9	9	9	9
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	105	105	105	104	105	105	103	103	102	104	105	106
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Muckadilla

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	2	2	2	2	2	2	1	2	2	2	4	2
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	26	26	26	26	26	26	25	23	23	23	25	25
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Mungallala

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***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 *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	35	35	36	36	36	36	36	36	36	36	36	36
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Roma

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	49	53	52	41	68	65	46	45	62	56	64	53
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	830	836	790	737	725	721	686	676	662	657	663	654
No. of failures for previous 12 month period	1	1	1	1	1	1	0	0	0	0	0	0
% of samples that comply	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Surat

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	4	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	63	63	63	63	63	63	60	60	60	60	59	59
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Wallumbilla

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	4	4	4	4	4	4	4	4	4	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	39	40	41	41	42	43	44	45	46	47	48	48
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Drinking water scheme: Yuleba

Year	*2015-16*											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	4	4	4	4	4	4	4	4	4	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	49	49	49	48	48	48	48	48	48	48	48	48
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%
Compliance with 98% annual value	YES	YES	YES	YES	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 refered 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).

Appendix B – Implementation of the DWQMP Risk Management Improvement Program

Table 3 – Progress against the risk management improvement program in the approved DWQMP

Item No.	Scheme Component / Sub-component	Action(s)	Target date/s	Status as at Dec 2016	(If implementing these actions will take longer than anticipated, please provide detail, as it may affect the approved DWQMP)
	Injune	*Bores Centralised to Ground Reservoir, Booster Pumps for Distribution, and Generator*	*Complete*	*Complete*	
	All Towns	*Rekey Dosing Sheds*	*Complete*	*Complete*	
	Amby, Mungallala, Wallumbilla	*Install Generators*	*Complete*	*Complete*	
	Surat	*Filter Media Being Replaced*	*December 2016*	*In Progress*	
	Surat	*Clarifier Upgrade & Tank Replacement*	*June 2017*	*In Progress*	
	All	*Network Modelling Software Purchased, allowing for easier modelling of future upgrades and demands in the towns*	*On-going*	*On-going*	
	Roma	*Hydrogeological Assessment*	*March 2017*	*In Progress*	