Drinking Water Quality Management Plan (DWQMP) report

2015-2016

Banana 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
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 Banana Shire 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. Overview of Operations

Council operates a total of nine (9) drinking water supply schemes throughout the Shire consisting of:-

- Banana
- Baralaba
- Biloela
- Callide Dam
- Goovigen
- Moura
- Taroom
- Thangool
- Theodore

Council also operates non-potable water supply schemes at Wowan and Cracow. The non-potable schemes are not covered by this plan.

Council manages drinking water quality through its approved Drinking Water Quality Management Plan (DWQMP) which protects public health by ensuring the provision of a safe water supply.

Council operates treatment plants at Biloela (supplying Biloela, Thangool and Callide Dam communities), Moura (supplying Moura and Banana), Baralaba, Taroom and Theodore. Goovigen is a chlorinated bore supply. Council operates and maintains all water supply infrastructure in these schemes including intakes, pumping stations, treatment facilities, reservoir storages and reticulation mains.

3. Actions taken to implement the DWQMP

Progress in implementing the risk management improvement program

Key items of progress are highlighted in Appendix B

In summary the following items progressed during the reporting period.

- Implemented dead end mains flushing program
- Reviewed CCP operational targets, alert limits, and critical limits
- Cyanobacterial monitoring and action plan developed
- Moura WTP Stage 1 upgrades completed
- Biloela WTP Stage 1 upgrades completed
- Goovigen reservoir and chlorination facility progressing
- Baralaba WTP replacement progressing

- Notification requests were sent to Sunwater regarding releases upstream of treatment plant intakes
- Banana reservoir construction and monitoring implemented
- Review of monitoring results to identify trends and validate sampling frequency

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

Additional E. coli sampling and analysis is performed using Banana Shire Council's own laboratories. This needs to be formally incorporated into the DWQMP during the amendment process.

Amendments made to the DWQMP

The DWQMP Improvement Plan (Appendix Q) was updated to incorporate the 2015 column for actions.

4. 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.

- The results of the verification monitoring have been summarised in Appendix A

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

This financial year there were four instances where the Regulator was notified under sections 102 or 102A of the Act. Three of these notifications involved the detection of *E. coli* – an organism that may not directly represent a hazard to human health, but indicates the presence of recent faecal contamination. The remaining one of four notifications; was a non-compliance with water quality criteria caused by an excess of free residual chlorine. None of these incidents required Banana Shire Council to issue a boil water or do not drink notice in the communities.

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

Incident Description: The first non-compliance was a detection of *E. coli* from a routine sample taken on 1/09/2015 at Lion's Park, Biloela. 1 *E. coli* organism per 100 mL was detected, with a disinfection residual of 0.19 mg/L.

Corrective and Preventative Actions: The sampling procedure was reviewed and samplers were taken through the sampling procedure again. All follow up samples were free of *E. coli*.

Incident Description: The second non-compliance was a detection of *E. coli* from a routine sample taken on 4/01/2016 at Stopford St median, Baralaba. 5 *E. coli* organisms per 100 mL were detected, with a disinfection residual of 0.07 mg/L.

Corrective and Preventative Actions: The target free chlorine residual was increased to 2.0mg/L to achieve a residual free chlorine throughout reticulation of 0.2mg/L. Sampling and testing was performed at all reticulation sampling points to ensure that the residual target was achieved, and the reservoir setpoints were changed to increase the volume of water exchanged. Follow up sampling did not detect any further E. coli.

[1] Refer to *Water Quality and Reporting Guideline for a Drinking Water Service* for the water quality criteria for drinking water.

Incident Description: The third non-compliance was a detection of *E. coli* from a routine sample taken on 1/03/2016 at Lion's Park, Biloela. 1 *E. coli* organism per 100 mL was detected, with a disinfection residual of 0.08 mg/L.

Corrective and Preventative Actions: The target free chlorine residual was increased to 0.6mg/L to achieve a residual free chlorine throughout reticulation of 0.2mg/L. Sampling and testing was performed at all Biloela reticulation sampling points to ensure that the residual target was achieved. Flow paced chlorine dosing was reinstated and monitored to ensure correct operation. Follow up sampling did not detect any further E. coli.

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

Incident Description: On the 27/6/2016 several customers from Thangool reported a strong chlorine taste and odour in the water supply to Banana Shire Council. When testing the mains in Thangool it was found that the residual chlorine was in exceedance of the ADWG guideline.

Corrective and Preventative Actions: The mains supply to Thangool was tested and found to be within the guideline values. Water mains throughout Thangool were flushed to reduce the chlorine levels to within the ADWG levels and follow up monitoring and checking with affected customers was undertaken.

Investigation after the incident found that the chlorine dosing equipment had a fault that allowed overdosing of chlorine during high flow periods. All routine maintenance and inspection had been performed according to manufacturer and legislative requirements. The dosing controller was replaced and commissioned to ensure that chlorine dosage was unaffected by mains flow.

6. Customer complaints related to water quality

Banana Shire 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 1000 customers)

	Suspected Illness	Discoloured water	Taste and odour	Total
Banana	0	0	0	0
Baralaba	0	4 (46.51)	0	4 (46.51)
Biloela	0	9 (3.51)	3 (1.17)	12 (4.68)
Callide Dam	0	0	0	0
Goovigen	0	0	0	0
Moura	0	0	0	0
Taroom	0	0	0	0
Thangool	0	0	2 (13.16)	2 (13.16)
Theodore	0	0	0	0
Total	0	13 (2.64)	5 (1.02)	18 (3.66)

Suspected Illness

Complaints are sometimes received from customers who suspect their water may be associated with an illness they are experiencing. Banana 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 2015-2016, there were no complaints or confirmed cases of illness arising from the water supply system.

Discoloured water

Customer complaints regarding dirty were received from within the Biloela scheme in December 2015 and January 2016. 2 complaints within the Baralaba Scheme in January 2016 related to dirty water. There were an additional 2 dirty water complaints received in Baralaba in March 2016. The dirty water complaints were investigated and after laboratory analysis are understood to be a result of oxidised manganese within reticulation. The nearby mains were flushed to remove the dirty water to achieve clean water within the mains and the customers advised to flush their internal taps for up to 10 minutes to remove any dirty water in their pipes. The flushing targeted specific areas such as dead-end mains, where it was anticipated the dirty water would not be flushed through normal use. All customers who reported a complaint were advised of the reasons for the dirty water and were requested to flush their own internal piping to remove the dirty water on their premises. The frequency and volume of the routine dead end flushing is continually monitored to maximise efficiency of dirty water removal.

Taste and odour

Notification of taste and odour complaints was received on 29/10/2015. The complaint was related to a salty taste and was related to the use of groundwater during a WTP shutdown for construction. Once reported by the customers, Banana Shire Council investigated the issue to ensure the safety of the drinking water. Investigation of this complaint found no public health risks.

On the 27/6/2016 customers from Thangool reported a strong chlorine taste and odour in the water supply to Banana Shire Council. When testing the mains in Thangool it was found that the residual chlorine was in exceedance of the ADWG guideline.

The mains supply to Thangool was tested and found to be within the guideline values. Water mains throughout Thangool were flushed to reduce the chlorine levels to within the ADWG levels and follow up monitoring and checking with affected customers was undertaken.

Routine monitoring of residual levels within reticulation has been maintained and no further complaints recorded.

7. Findings and recommendations of the DWQMP auditor

Banana Shire Council arranged for Bligh Tanner Pty. Ltd. to conduct a regular audit of the DWQMP during the 9th and 10th of November 2016, covering the time period from 2015-2016. The purpose of the audit was 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 report are included below:

- *Summary of auditor's findings*
  - Some schematics and associated scheme descriptions were identified as inaccurate or incomplete
  - Critical control points were not all implemented as stated
  - Operational monitoring was not all implemented as stated
  - Verification monitoring was not all implemented as stated
- *Recommendations of the auditor*
  - That the CCP Procedures be reviewed and updated to reflect operating conditions and fully implemented
  - The monitoring plan should be amended to reflect the actual sampling taken to avoid potential miscommunication when undertaking regulatory reporting.

The audit report guideline requires that the report also states the planned actions to implement audit recommendations. This is best achieved by individually addressing each recommendation made by the auditor.

It is intended that the recommendations of the auditor be implemented as part of the next review and will be incorporated into the amendment plan due in February 2017. Improvements to the DWQMP as recommended in the audit report will also be incorporated into the review process and actioned accordingly.

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

A regular review of the DWQMP was conducted between approval of the DWQMP amendment in September 2015 and the end of the reporting period, and covered the time period from the issue of the amended monitoring plan and the end of the reporting period. 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 was conducted by:

- *Anthony Lipsys (Manager Water Services)*
- *Simin Sabah (Treatment Engineer)*
- *Col Kirkegaard (Treatment Supervisor Dawson North)*
- *John Tweed (Treatment Supervisor Dawson South)*
- *Tom Kenyon (Treatment Callide Valley)*
- *Michael Armstrong (Coordinator Compliance and Reporting)*

The review findings are summarised in Appendix C – "Summary of review actions identified."

Appendix A – Summary of compliance with water quality criteria

Table 2 A - *E. coli* verification monitoring Banana
(Includes Moura WTP Treated Water sampling)

Drinking water scheme: Banana

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	5	6	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												61
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 B – *E. Coli* verification monitoring Baralaba

Drinking water scheme: Baralaba

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	3	3	3	2	2	2	5	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	1	0	0	0	0	0
No. of samples collected in previous 12 month period												35
No. of failures for previous 12 month period												1
% of samples that comply												97.1%
Compliance with 98% annual value												NO

Table 2 C – *E. Coli* verification monitoring Biloela

Drinking water scheme: Biloela

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	12	12	12	12	12	10	12	12	12	12	12	12
No. of samples collected in which *E. coli* is detected (i.e. a failure)	0	0	1	0	0	0	0	0	1	0	0	0
No. of samples collected in previous 12 month period												142
No. of failures for previous 12 month period												1
% of samples that comply												98.6%
Compliance with 98% annual value												YES

Table 2 D – *E. Coli* verification monitoring Callide Dam Village
(Includes Biloela WTP Treated Water sampling)

Drinking water scheme: Callide Dam Village

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	5	4	5	5	5	4	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												58
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 E – *E. Coli* verification monitoring Goovigen

Drinking water scheme: Goovigen

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	1	1	1	1	1	1	1	1	1	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												12
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 F – *E. Coli* verification monitoring Moura

Drinking water scheme: Moura

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	12	12	12	12	9	10	12	12	12	12	12	12
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												139
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 G – *E. Coli* verification monitoring Taroom

Drinking water scheme: Taroom

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	6	6	6	6	6	6	6	6	6	6	6	6
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												72
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 H – *E. Coli* verification monitoring Thangool
(Includes Biloela Mixed Treated sampling)

Drinking water scheme: Thangool

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	5	5	5	6	6	4	6	5	6	5	6	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												64
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 2 I – *E. Coli* verification monitoring Theodore

Drinking water scheme: Theodore

Year	***2015/16***											
Month	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***
No. of samples collected	6	6	6	6	6	6	6	6	6	6	6	6
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												72
No. of failures for previous 12 month period												0
% of samples that comply												100.0%
Compliance with 98% annual value												YES

Table 3 A – Verification monitoring - Chemical

SCHEME NAME	CHEMICAL PARAMETER #	UNITS OF MEASUREMENT	TOTAL COUNT OF TESTS	NO OF TEST PASSED	% COMPLIANCE	LABORATORY NAME
Baralaba	SWA	mg/L	8	8	100	QH
Biloela	SWA	mg/L	20	20	100	QH
Goovigen	SWA	mg/L	4	4	100	QH
Moura	SWA	mg/L	8	8	100	QH
Taroom	SWA	mg/L	12	12	100	QH
Theodore	SWA	mg/L	11	11	100	QH

Comments: Chemical parameters # (Standard Water Analysis) – which includes *Calcium, Sodium, Potassium, Magnesium, Bicarbonate, Carbonate, Hydroxide, Chloride, Fluoride, Sulphate, Iron, Manganese, Zinc, Aluminium, Boron, Copper, Nitrate, Sulphate, Silica.*

Table 3 B – Verification monitoring – Metals

SCHEME NAME	CHEMICAL PARAMETER #	UNITS OF MEASUREMENT	TOTAL COUNT OF TESTS	NO OF TEST PASSED	% COMPLIANCE	LABORATORY NAME
Baralaba	Metals	mg/L	8	8	100	QH
Biloela	Metals	mg/L	20	20	100	QH
Goovigen	Metals	mg/L	4	4	100	QH
Moura	Metals	mg/L	11	11	100	QH
Taroom	Metals	mg/L	6	6	100	QH
Theodore	Metals	mg/L	6	6	100	QH

Comments: Chemical parameters* - (Heavy Metal Analysis) - which includes - Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Nickel, Zinc.

Table 3 C – Verification monitoring – Physical Parameters

SCHEME NAME	PHYSICAL PARAMETER	TOTAL COUNT OF TESTS	NO OF TEST PASSED	% COMPLIANCE	LABORATORY NAME
Baralaba	Physical	8	8	100	QH
Biloela	Physical	21	21	100	QH
Goovigen	Physical	4	4	100	QH
Moura	Physical	8	8	100	QH
Taroom	Physical	12	12	100	QH
Theodore	Physical	11	11	100	QH

Comments: Physical Parameters: includes - Conductivity, pH, Total Hardness*, Alkalinity, Residual Alkalinity, Total Dissolved Solids, Total Dissolved Ions, True Colour, Turbidity. *Total Hardness is an aesthetic property and has no health guideline value, any aesthetic considerations are not included in this table.

Table 3 D – Verification monitoring – Pesticides

SCHEME NAME	PESTICIDES	TOTAL COUNT OF TESTS	NO OF TEST PASSED*	% COMPLIANCE	LABORATORY NAME
Baralaba	Herbicides / Pesticides	9	9	100	QH
Biloela	Herbicides / Pesticides	22	22	100	QH
Goovigen	Herbicides / Pesticides	2	2	100	QH
Moura	Herbicides / Pesticides	8	8	100	QH
Taroom	Herbicides / Pesticides	5	5	100	QH
Theodore	Herbicides / Pesticides	7	7	100	QH

*Includes non-recordable detections of analytes.

Table 3 E – Verification monitoring – Radiological

SCHEME NAME	RADIOLOGICAL PARAMETER	TOTAL COUNT OF TESTS	NO OF TEST PASSED	% COMPLIANCE	LABORATORY NAME
Baralaba	Corrected Activity	2	2	100	QH
Biloela	Corrected Activity	10	10	100	QH
Goovigen	Corrected Activity	1	1	100	QH
Moura	Corrected Activity	1	1	100	QH
Taroom	Corrected Activity	2	2	100	QH
Theodore	Corrected Activity	1	1	100	QH

Table 3 E – Verification monitoring – Disinfection By-Products

SCHEME NAME	PARMETER	UNITS OF MEASUREMENT	TOTAL COUNT OF TESTS	NO OF TEST PASSED
Baralaba	THM'S	µg/L	11	11
Biloela	THM'S	µg/L	15	15
Goovigen	THM'S	µg/L	6	6
Moura	THM'S	µg/L	12	12
Taroom	THM'S	µg/L	10	10
Theodore	THM'S	µg/L	7	7

Appendix B – Implementation of the DWQMP Risk Management Improvement Program

Table 4 – Key items of 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 <<date>>	(If implementing these actions will take longer than anticipated, please provide detail, as it may affect the approved DWQMP)
All schemes (excluding Taroom)	Cyanobacteria	Cyanobacteria response and action plan	End 2012	Waiting to be approved in QA system	
All schemes	Spill into raw water response	Contact internal emergency liaison	End 2012	Draft prepared	
All schemes	DBP generation	Review THM monitoring program	-	Complete	
Theodore WTP	Dosing of PAC, KMNO4	Implement dosing to control iron, manganese, algal toxins and reduce THM formation	-	Waiting on plant upgrade	2016-17
Theodore WTP	Filter breakthrough	Automate backwash	-	Waiting on plant upgrade	2016-17
Theodore WTP	Chlorine over/under dosing	Install monitoring	-	Complete	
Moura/Biloela WTP	Dosing of PAC, KMNO4	Implement dosing to control iron, manganese, algal toxins and reduce THM formation	2014/2015	Complete	
Biloela WTP	Filter breakthrough	Automate backwash	2014/2015	Complete	
Baralaba WTP	Dosing of PAC, KMNO4	Implement dosing to control iron, manganese, algal toxins and reduce THM formation	2014/2015	Awaiting practical completion	
Banana Shire Bores	Integrity investigation	Check bores for potential for contamination and rectify	-	Ongoing	

Appendix C – Summary of review actions identified

Table 5 – Action status

Action	Detail	Complete
CCP for Turbidity targets	Review individual schemes against current guideline	Y
CSG Water report	Download annual report and check for water quality excursions.	Y
Moura Chlorine CCP	Increase residual target to 0.8-1.2 mg/L and include in amendment	N
Biloela TWPS Cl2 target	Set residual target to 0.5 - 0.7 mg/L and include in amendment	N
Theodore WTP CCP	Set residual target to 1.2-1.7 mg/L and include in amendment	N
Baralaba WTP Mn target	CCP for management plan amendment	N
Banana Shire Mn CCP procedure	CCP for management plan amendment	N
CCP for turbidity	Investigate targets for plants (0.3mg/L alert) for inclusion in amendment	Y
Fluoride check standard	Implement QC calibration check	Y
Theodore WTP online cl2	Review current probe system for suitability and performance	Y
Moura Raw Water Turbidimeter	Check Stage 2 tender documentation for meter	Y
CCA testing from Theodore landfill	Check requirement and if still open. Metals analysis of Moura Raw Water shows no Arsenic or Chromium	Y
Tools disinfection procedure	Mondays all tools are sanitised. After any sewer work they are sanitised on return to depot.	Y
Residences on water mains + raw	Obtain list of customers on Raw or large mains. List has been developed.	Y
Contaminated land register	Obtain list of contaminated land from Environment Section.	Y
Baralaba res fence	Not installed at time of inspection.	N
Review bore sealing Biloela borefield	Bore infiltration inspection. Needs schedule implemented.	Partial
Taroom WTP upgrade design report	Tender has been issued for design of upgrade.	Y
Calibration frequency review	Check frequency of calibration requirements for instruments	N
Biloela Dam Manganese increase from pigging	Draft letter to Sunwater re Stag Creeek pipeline for notification in advance	N
Check Biloela WTP Supernatant reuse	Reuse of supernatant limited to 10% operationally. Documented.	Y
Taroom bore monitoring at site	Review what has been performed previously for suitability.	N