

## **DRINKING WATER QUALITY MANAGEMENT PLAN 2020/2021 ANNUAL REPORT**

## 2020/2021 ANNUAL REPORT

HINCHINBROOK SHIRE COUNCIL

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#### HINCHINBROOK SHIRE COUNCIL DRINKING WATER QUALITY MANAGEMENT PLAN 2020/2021 REPORT

## 1. GLOSSARY OF TERMS

ADWG	Australian Drinking Water Guidelines (2011). Published by the National Health and Medical Research Council of Australia.
DWQMP	Drinking Water Quality Management Plan
E. coli	Escherichia coli, a bacterium which is considered to indicate the presence of faecal contamination and therefore potential health risk.
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
RMIP	Risk Management Improvement Program, which was developed in the Drinking Water Quality Management Plan.
<	Less than
>	Greater than



#### HINCHINBROOK SHIRE COUNCIL DRINKING WATER QUALITY MANAGEMENT PLAN 2020/2021 REPORT

#### 2. INTRODUCTION

The Water Supply (Safety and Reliability) Act 2008 requires water service providers in Queensland to provide a Drinking Water Quality Management Plan Report for each financial year from when the Drinking Water Quality Management Plan (DWQMP) was implemented.

This report documents the performance of Hinchinbrook Shire Council's drinking water service with respect to water quality and performance in implementing the actions detailed in the DWQMP for the 2020/2021 financial year. 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.

The Report details the following information:

- Document actions taken by the service provider to implement the DWOMP.
  - o Summarise any amendments that have been made to the DWOMP.
  - Describe which actions in the Risk Management Improvement Program (RMIP) were completed, currently in progress or deferred.
  - Discuss if the actual verification monitoring undertaken met the monitoring program described in the DWQMP.
- Details of compliance with water quality criteria for drinking water.
  - o Summary of results for the verification monitoring for the drinking water service.
  - o Detail the months, if any, where the annual value for E. coli was not achieved for the service.
  - Comments on where the water quality results met the recommended values in the Australian Drinking Water Guidelines, E. coli and fluoride standards.
- Details information given to the Regulator under sections 102 and 102A of the Act.
  - Summary of each incident reported to the Regulator and describe the corrective and preventive actions undertaken.
- Summary of any water quality complaints received and the responses that were undertaken.
- Details of the findings and any recommendations of audit reports given to the Regulator.
- Outcome of any review and how the service provider has addressed any matters raised in the review.

## 3. IMPLEMENTATION OF THE DWQMP

#### 3.1. Amendments to Council's DWQMP

Hinchinbrook Shire Council's DWQMP was approved on the 25 March 2013 by the Department of Energy and Water Supply. Hinchinbrook Shire Council undertook a Review of their DWQMP on the 25 March 2020, which resulted in some amendments. Revision F of Council's DWQMP was issued on 22 March 2021.

#### 3.2. Risk Management Improvement Program

Hinchinbrook Shire Council's DWQMP includes a Risk Management Improvement Program (RMIP), which aim is to manage any unacceptable residual risks identified by the hazard/risk assessment and improve parts of the Plan where deficiencies in information did not allow the criteria to be completely and accurately addressed.

The RMIP identified 37 areas where Council could implement changes to manage identified hazards/risk and uncertainties. The program outlines interim, short-term and long-term actions for Council to implement to manage the identified hazards/risk and uncertainties.

The following table is an excerpt from the RMIP table in Council's DWQMP and addresses the actions in the RMIP that have been completed, currently in progress or have been deferred.



#### Table 3.1 – Summary of Items completed, in progress or deferred from RMIP

	Denotes that it is	a copy from	the RMI	IP in HSC's	S DWOMF
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	Ochomo	Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
1	All	River and Groundwater Systems	Inadequate well or bore head protection	~ Improve borehead construction under the borehead replacement program	Investigate upgrade of Halifax Bores as first priority. Halifax has a total of 5 bores, but not all are used due to low pump rates and the possibility of saline intrusion. Cyclone Yasi has also damage fencing and there is currently a power supply issue to some bores.	Commence upgrade of Halifax Bores, if required seal and abandon unused bore.	Complete an inspection report for all bores (Macknade, Forrest Beach, Halifax and Como Road) and complete a works program for required maintenance.	2017	100% complete and operational	Complete
2	All	River and Groundwater Systems	Industrial chemical waste discharge contaminating groundwater &/or surface water	~ No control over private enterprise. ~ Continue to monitor chemical levels in raw water supplies.	Investigate private enterprises within the district that could affect drinking water quality and the possible risks that they present. Those identified will be posing a direct risk to council's drinking water supply.		Continue with existing chemical monitoring and identify any significant changes.	Ongoing	Ongoing	Standard Water Analysis taken from each WTP every month.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
3	3 (Forrest Beach)	Groundwater	High iron levels in groundwater	~ Current proposal for funding in place to connect the Forrest Beach Water Supply to Scheme 1 & 2 which will allow a backup water supply if groundwater quality is not suitable for consumption. ~ Looking at new filtration systems	Submit application for funding assistance to the government.	Advertise a tender for the works to be completed. If works can be done internally prepare quote.	Construction phase. Finalise project.	Funding dependant	Completed	Water main has been commissioned from Ingham to Forrest Beach. Upgrades have also been completed on the aerator and sedimentation channels (clarifier).
4	All	WTP	Open filtration system causing growth of cyanobacteria	~ Testing during hot months of the year ~ Improvements to the aeration and filtration system	Provide temporary shading.	Issue Expression of Interest for consultants to investigate council's existing water treatment plants and what would be required for their upgrade.	Depending on results from consultant's report, budget for upgrades to commence.		100% complete and operational	Complete
5	3 (Forrest Beach)	Reservoir	Rainwater ponding on reservoir roof	~ Investigate costs into sealing roof	Prepare specification for require work. Complete cost estimate.WTP Operator to check condition of reservoir roof and conduct any remedial works that can be completed to reduce risk of contamination from ponding rainwater.	Advertise a tender for the works to be completed. If works can be done internally prepare quote.	Construction phase. Finalise project.	December 2013	Complete	Complete





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
6	2	WTP	Chemical Dosing Failure - Soda Ash	~ A pH test is always conducted prior to dosing with soda ash.	Investigate existing options and equipment.	Prepare site for installation.	Install and commission chemical dosing equipment.	June 2014	Complete	New aerators installed, which altered the pH which eliminated the need for soda ash dosing.
7	1	River and Groundwater Systems	High Turbidity in river water	~ Installation of turbidity meter	Set control points and critical limits to be monitored.	Purchase and installation of turbidity meter.	Monitor turbidity in supply.  If control points exceeded then river system is to shut off with use to only recommence when turbidity has reached an acceptable level.	December 2017	Completed	Identified in DWQMP Audit completed on 28 April 2017. Completed
8	1	River and Groundwater Systems	Protozoa Control	~	Determine appropriate p points for testing of Prot		Continual testing for protozoa.  If protozoa are found, the relevant health authority to be advised and necessary measure put in place.	Ongoing	Ongoing	Identified in DWQMP Audit completed on 28 April 2017.  Program to be developed in 2022 depending on future use of Herbert River Supply.
9	1	WTP	Increase storage capacity	~ Current proposal for funding in place to construct new bore at Como Rd along with upgrading the Depot WTP, which will allow a secure water supply if river water quality is not suitable for consumption.	Submit application for funding assistance to the government.	Advertise a tender for the works to be completed.	Construction phase. Finalise project.	Funding Dependent	Complete	Project Completed. New 2.5ML reservoir constructed at Ingham Depot Water Treatment Plant. 45% funding was allocated to this project as part of the Building Our Regions Program.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
10	All	River and Groundwater Systems	Contamination from Septic tanks & Sewer Mains (breakages, etc)	~ Undertake testing monthly for the presence of E. Coli in raw water and monitor the data to identify any peaks associated with high rainfall, etc.	E. Coli testing in river and bore sources. Conduct during dry and wet seasons.	Investigate laboratory results.	Depending on results, further investigations may need to take place to find the source of bacteria into raw source. Some bacteria is to be expected.	Commence first round of testing early 2013	Completed and Implemented	E. Coli testing in river and bore sources commenced in August 2012 and are currently being tested at least once per month.
11	All	Groundwater	Discharge from urban stormwater during rainfall events	~ Terrain currently completing a study on the effects of pesticides to the catchments water supply. Results expected in a 2 year timeframe. ~ Improve borehead construction under the borehead replacement program	As per Item 1 (borehead construction)	As per Item 1 (borehead construction)	As per Item 1 (borehead construction)	As per Item 1 (borehead construction)	100% complete and operational	Complete
12	All	WTP	Formation of disinfection by-products	~ Enforce testing on a yearly basis.	Commence testing on yearly basis. Depending on results further action may need to be taken, but this will need to be assessed when further information is available.	As per interim.	As per interim.	Commence first round of testing early 2013	Ongoing	Testing for disinfection by-products has commenced. Regular testing commenced in January 2021 and are currently being tested every six months
13	All	Operational & Maintenance Procedures	N.A.	N.A.	Work in conjunction with council surveyor to collate existing data and determine areas where data is missing.	Assign asset numbers and produce drawings that can be distributed to staff.	Final dataset of mapped assets, including a full list of assets with unique numbering which will work in conjunction with council's asset management system.	Jul-13	Ongoing	Operation and Maintenance Procedures have been developed and will continually be updated as required. Council's asset management plans have been finalised with operational procedures to be updated.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
14	All	Mapping of Water Assets	N.A.	N.A.	Collate existing data and determine areas where data is missing.	Begin collating and putting together data.	Final dataset of mapped assets.	December 2012	Ongoing	Complete and available on Dial Before You Dig.
15	All	Staff Training	N.A.	N.A.	Commence training for Water Treatment Assistants. Certificate II or III in Water and Waste Water Treatment.	Provide assistance to staff undertaking Certificate II or III.	Have sufficient staff who have completed the required training as per national requirements. Continue to provide any training that would be beneficial to the day-to-day operations.	July 2014 (based on a two year completion)	Ongoing	Council has implemented a program for Water Treatment Plant Assistants to undertake the Certificate II in Water Treatment. Three Water Treatment Plant Assistants successfully completed the program in 17/18. 2 operator assistants completed their certificate III in Water Operations in 2018 and 1 has completed the course in 2019. 1 Operator Assistant currently finalising Certificate III in water operations.
16	AII	Customer Complaint Performance	N.A.	N.A.			Council upgrading the Financial System which will include a new component to handle customer complaints. It will be a major upgrade to the system and it will include easier access to data, eg. Response times.	December 2014	Complete	Council has implemented a new customer request system that incorporates all customer requests within Council in line with the customer service charter.
17	All	Historical Data Database	N.A.	N.A.	Discuss with council staff that are familiar with creating databases and work out an approach to creating the database.	Gather all water quality data into the format required and create database.	Have a fully functional database.	December 2014	In Progress	Complete  Existing Database in Excel has been improved to provide some reporting functions. Further upgrades to the database are required as further information on reporting is available.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
18	All	Drinking Water Policy	N.A.	N.A.	Prepare draft Drinking Water Policy.	Conduct a meeting with relevant parties to discuss policy and make notes on areas for improvements.	Finalise policy and get Council to endorse.	June 2021	In Progress	Identified in DWQMP Audit completed on 28 April 2017.  To be developed in 2022.
19	All	SCADA Alarm Procedure	N.A.	N.A.	Prepare templates for procedure. Collate any relevant data that could be of use.	Conduct a meeting between relevant tasks to discuss the template that has been produced and make notes on areas for improvements. Conduct site inspections and take photos to include in the procedure.	Create a final Procedure and begin the implementation process. Procedures are to be uploaded to the Council's intranet and distributed to all staff members.	June 2021	In Progress	Identified in DWQMP Audit completed on 28 April 2017.  Upgrading to digital clear SCADA over the next 3 years. New procedures to be developed as part of the project implementation and relevant staff trained.
20	All	Hydraulic Model	N.A.	N.A.		Council to procure consultant to construct Hydraulic Model of Council's water network.	Maintain and update as required.	June 2016	Completed	Completed





21	AII	All	Lack of asset management	IT Management System with oversight	High level review and meeting with IT	Gather system information	MC-01-Vulnerability assessment Undertake a cybersecurity audit including a penetration test: - identify critical sites and those with cyber access, devices and access points specific to the Supervisory Control and Data Acquisition (SCADA) for water quality management. These will include 1) pump sites. 2) related operational technology systems - servers, firewalls, network switches, access points, Remote Terminal Units (RTUs) and Programmable Logic Controllers (PLCs). 3) Implement actions to maintain effective cyber security controls of SCADA and Industrial Control Systems (ICS). 4) Implement actions and integration consisting of standards and processes to manage both information technology (IT) and operational technology (OT). 5) Implement a single point access to enter	June 2022	In Progress	Currently being developed in conjunction with the IT department for a Council wide cyber security system.  Upgrading to digital clear SCADA over the next 3 years which allow for improved cyber security compared to existing system.
							technology (IT) and operational technology (OT). 5) Implement a single			





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
							protocol/procedure to the IT/OT network.			
22	All	All	Inability to detect critical assets	IT Management System with oversight	High level review and meeting with IT	Gather system information	MC-02 -Governance structure - Framework to be in place with responsibilities - Procedures for Information technology and operation technology security to be created. MC-03- Security safeguards - Create a list of permitted applications to be installed / run within Council's Standard Operating Environment (SOE)	June 2022	In Progress	Currently being developed in conjunction with the IT department for a Council wide cyber security system.
23	All	All		IT Management System with oversight	High level review and meeting with IT	Gather system information	MC - 04 Detection process - Require SOE security monitoring system that reports anomalies. e.g., high CPU use, user accounts, high network traffic. MC-05 Response & Recovery - Organise routine backups / archiving for ICS equipment, servers and applications.	June 2022	In Progress	Currently being developed in conjunction with the IT department for a Council wide cyber security system.





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		Scheme	Hazard/	Proposed Preventative		Actions			at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Target Date/s	2021	
24	AII	Cyber Security – Access to sites	Unauthorised access to sites	Increase site security to decrease the chances of unauthorised access.	Ensure all sites are secure if there is no personnel onsite.	Update camera systems and number of cameras to deter intruders.	Install security card access to all sites.	June 2030	In Progress	Council to investigate installing swipe card entry to all Water Sites over the next 10 years
25	All	Cyber Security – Access to drives, chlorinators, controllers, etc	Unauthorised access to drives, chlorinators, controllers, etc	Improve security for these devices to decrease the chances of unauthorised access.	Ensure all drives, chlorinators, controllers, etc are secure if there is no personnel onsite.		Passcode protect all drives, chlorinators, controllers, etc to operators, managers, supervisors and fitters	June 2025	In Progress	Council to investigate securing all drives, chlorinators, controllers, etc with password protection.





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	Scheme	Scheme Component/	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scriente	Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
26	All	AII	Disruption of Cyber information (IT)	Private network and access management	High level review and meeting with IT	Gather system information	MA - 01 Build out private SCADA network - requires testing and cutover for all water facilities, sites & equipment to ensure the existing network is fully private.  MA - 02 Build single point of access and authentication method - Undertake after MA- 01. A single point access should be built as a mechanism to enter the telemetry network.  MA - 03 Implement rules to prevent across network access - After MA-01 & MA-02, SCADA IT section to create and document a procedure for secure entry to the IT/OT network.  MA - 04 Consider disallowing open internet access - To be actioned with MA-01 & MA-02. Address vulnerability scenarios but also allows for system updates (e.g., allowing Windows Update).	June 2022	In Progress	Currently being developed in conjunction with the IT department fo a Council wide cyber security system.  Upgrading to digital clear SCADA over the next 3 years which allow for improved cyber security compared to existing system.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
27	All	Cyber Security – Antivirus scan	N.A	N.A	Council use Sophos antivirus software to scan antivirus on systems		Moving to cloud version for better security and operation which will covers Application whitelisting, application hardening	March 2020	Completed	Moving to cloud version completed in March 2020
28	All	Cyber Security – Patches to Systems	N.A	N.A	Automatic Install windows patches to end users workstation and laptops on Council Systems	Quarterly install Windows Patches on Servers on Council Systems	SCCM patch management software planning to implement for better operation	Dec 2021	Ongoing	Patches installed by IT department. Further patches to be installed as required by IT department.
29	All	Cyber Security – Backups	N.A	N.A	Council following daily, weekly and monthly backup plans with 3— 2-1 strategies of all Servers		Council following monthly backup tapes off-site	March 2021	Ongoing	Council is converting over to Teams with all files located in teams are automatically backed to the cloud with a 90 day recovery timeframe. All files on existing file servers are backed up twices daily to other file servers.
30	All	Cyber Security – AusCERT Membership	N.A	N.A			Council is member of AusCERT orgazintion and follow the incident and service management for cyber security	Dec 2021	Ongoing	Council is currently a member of AusCERT.
31	All	All	Inability to detect a cyber security event	Increased awareness from operators surrounding physical security access on ICS sites, provided by means of training sessions. Add this to the procedures	Meeting with IT Officer	Allocated above	Once cyber security is implemented, create a procedure to monitor status	December 2023	In Progress	Cyber security training undertaken online through the IT department.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021	
32	All	Filtration	High Raw Water Turbidity affecting filter performance	Change raw water source, reduce filter hydraulic through put. Increase disinfection.	Change raw water source. Continue with weekly filtered/CWS turbidity monitoring using grab samples.	Write procedure	Gauge the raw versus filtered water to determine their performance based on HBT. This will set the disinfection level needed, but is also dependent on if UV is added, although likely not needed for all water sources excluding Herbert River.	December 2022	Ongoing	Turbidity Meter installed at Ingham Pumping Station however this supply is not currently in use since the upgrades carried out as part of the Hinchinbrook Water Security Project at the Ingham Depot . Weekly Turbidity samples carried out at each of the WTPs.
33	All	Raw water	High Raw Water Turbidity affecting filter performance	Change raw water source, reduce filter hydraulic through put. Increase disinfection.	Commence weekly raw turbidity monitoring using grab samples.	Write procedure	Consider online turbidity meters for each raw water source to ensure that the source can be turned off if turbidity reaches a set threshold.	December 2023	Ongoing	Turbidity Meter installed at Ingham Pumping Station however this supply is not currently in use since the upgrades carried out as part of the Hinchinbrook Water Security Project at the Ingham Depot . Weekly Turbidity samples carried out at each of the WTPs.
34	Ingham	Raw Water	High Raw Water Turbidity affecting filter performance due to use of Herbert River water source	Provide additional bore site.	Change raw water source within scheme or obtain water from another scheme.	Write procedure	Add duplication of Bore in the Ingham Depot WTP scheme to the RMIP.	December 2023	Ongoing	Turbidity Meter installed at Ingham Pumping Station however this supply is not currently in use since the upgrades carried out as part of the Hinchinbrook Water Security Project at the Ingham Depot . Weekly Turbidity samples carried out at each of the WTPs.
35	Lower Herbert	Raw Water	PFAS	Selection of raw water sources	Selection of raw water sources	Procedure	Investigate securing Kemps Rd Bore as this have no PFAS issues and has a high yield. Decommission Bores 3 & 4 if Kemps Rd is feasible, alternatively investigate other options for these bores.	December 2023	Ongoing	Bores 3 & 4 are no longer in use. New bore to be constructed at Kemps Road as part of 21/22 captial works program. Ongoing testing of remaining bores for PFAS.





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		Scheme	Hazard/	Proposed Preventative		Actions		Target	Status as at 30 June	Details and Update	
	Scheme	Component/ Sub-component	Hazardous Event	Measure	Interim	Short-term	Long-term	Date/s	2021		
36	Lower Herbert & Ingham	Raw Water	Trihalomethanes and Chlorates	Selection of raw water sources	Selection of raw water sources	Procedure	Consider changing the Halifax Depot to a chlorine gas facility to reduce the risk of THMs and Chlorates.	December 2023	Ongoing	Testing for disinfection by-products has commenced. Regular testing commenced in January 2021 and are currently being tested every six months	
37	All	Water Quality Data	All	Use SWIMLocal to record all water quality information	Continue with current system	Transfer all existing Water Quality Data to SWIMLocal and use basic functions in alignment with existing practise.	Strategic enhancement of information within SWIMLocal including alerts, reporting, additional operational monitoring, and alignment of operational monitoring.	December 2023	To be Commenced	Program to convert to SWIMLocal to be develop by end of 2022.	



## 4. COMPLIANCE WITH WATER QUALITY CRITERIA FOR DRINKING WATER

## 4.1. Escherichia Coli Results for Treated & Reticulated 2020/2021

Table 4.1 – Escherichia Coli Results for Scheme 1 Treated & Reticulated Water

Scheme1 Ingham Water S	Scheme1 Ingham Water Supply												
Month	JUL	AUG	SEPT	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
No. of samples collected	5	5	9	3	5	4	5	7	9	4	5	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	71	66	72	68	68	66	64	67	70	68	68	69	
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	

Table 4.2 - Escherichia Coli Results for Scheme 2 Treated & Reticulated Water

Scheme 2 Lower Herbert Water Supply												
Month	JUL	AUG	SEPT	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
No. of samples collected	6	5	6	6	5	4	3	6	8	4	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	67	65	68	68	68	67	64	65	65	63	64	65
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											



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Table 4.3 - Escherichia Coli Results for Scheme 3 Treated & Reticulated Water

Scheme 3 Forrest Beach Water Supply												
Month	JUL	AUG	SEPT	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
No. of samples collected	6	6	6	5	6	4	3	7	8	5	5	7
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	65	52	50	52	52	53	55	53	55	58	59	63
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											

### 4.2. Escherichia Coli Tests for Raw Water 2020/2021

Table 4.4 - Number Escherichia Coli Tests for Raw Water

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	TOTAL	JUL	AUG	SEP	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Scheme 1 - Ingham Water Supply	6	2	0	1	0	0	0	1	0	0	2	0	0
Scheme 2 - Lower Herbert Water Supply	4	1	0	0	1	0	0	1	0	0	1	0	0
Scheme 3 – Forrest Beach Water Supply	4	1	0	0	1	0	0	0	1	0	1	0	0





#### 4.3. Water Quality Data 2020/2021 - Scheme 1 Ingham Water Supply

Table 4.5 – Water Quality Data with Drinking Water Quality Criteria 2020/2021 – Scheme 1 Ingham Water Supply									
Parameter	Unit	Total Number of Samples Taken	Number of samples parameter was detected.	Number of samples exceeding health guideline value	Min	Max	Average		
Raw Water									
Nitrate	mg/L	5	5	0	0.66	15	6.05		
Sulphate	mg/L	5	5	0	1	23	8.04		
Fluoride	mg/L	5	5	0	0.05	0.22	0.09		
pH (Lab)	-	5	5	0	6.24	7.12	6.57		
Turbidity	NTU	5	2	0	2	3	2.50		
Aluminium	mg/L	5	2	0	0.05	0.09	0.07		
Boron	mg/L	5	2	0	0.02	0.02	0.02		
Copper	mg/L	5	3	0	0.031	0.1	0.06		
Iron	mg/L	5	2	0	0.07	0.1	0.09		
Manganese	mg/L	5	4	0	0.001	0.006	0.00		
Zinc	mg/L	5	2	0	0.07	0.19	0.13		
Treated Water		,					,		
Nitrate	mg/L	6	6	0	11	15	12.83		
Sulphate	mg/L	6	6	0	5.5	7.6	6.30		
Fluoride	mg/L	6	6	0	0.06	0.06	0.06		
pH (Lab)	-	6	6	0	6.59	0	0.00		
Turbidity	NTU	6	1	0	1	1	1.00		
Aluminium	mg/L	6	0	0	<0.03	<0.03	<0.03		
Boron	mg/L	6	0	0	<0.02	<0.02	<0.02		
Copper	mg/L	6	2	0	0.008	0.008	0.008		
Iron	mg/L	6	1	0	0.02	0.02	0.02		
Manganese	mg/L	6	1	0	0.001	0.001	0.001		
Zinc	mg/L	6	0	0	<0.06	<0.06	<0.06		
Reticulated Water		l			1	l	L		
Nitrate	mg/L	15	15	0	6.2	15	13.55		
Sulphate	mg/L	15	15	0	3.1	14	6.21		
Fluoride	mg/L	15	15	0	0.05	0.06	0.06		
pH (Lab)	-	15	15	0	6.5	7.19	6.78		
Turbidity	NTU	15	3	0	1	3	1.67		
Aluminium	mg/L	15	0	0	<0.03	<0.03	<0.03		
Boron	mg/L	15	1	0	0.04	0.04	0.04		
Copper	mg/L	15	8	0	0.003	0.014	0.01		
Iron	mg/L	15	5	0	0.003	0.014	0.01		
Manganese	mg/L	15	0	0	<0.001	<0.001	<0.001		
Zinc	mg/L	15	1	0	0.01	0.01	0.001		
Pesticides/Herbicides Summary*	ug/L	0	-	-	0.01	0.01	0.01		

NOTE: All results that equalled the limit of reporting are assumed to be zero for the purpose of calculating the average value.

<sup>\*</sup>Summary only has been provided. Only samples that have positive detections have been identified. All nil results (i.e. less than the limit of report) has been summarised and reported as total pesticides with zeroes entered for maximum, minimum and average concentration.



#### 4.4. Water Quality Data 2020/2021 - Scheme 2 Lower Herbert Water Supply

Table 4.6 – Water Quality Data with Drinking Water Quality Criteria 2020/2021 – Scheme 2 Lower Herbert Water Supply

Table 4.6 – Water Quality I  Parameter	Unit	Total Number of Samples Taken	Number of samples parameter was detected.	Number of samples exceeding health guideline value	Min	Max	Average
Raw Water							
Nitrate	mg/L	4	4	0	14	18	15.75
Sulphate	mg/L	4	4	0	12	17	15.50
Fluoride	mg/L	4	4	0	0.03	0.07	0.05
pH (Lab)	-	4	4	0	5.96	6.89	6.30
Turbidity	NTU	4	3	2	2	13	7.00
Aluminium	mg/L	4	0	0	<0.03	<0.03	<0.03
Boron	mg/L	4	3	0	0.04	0.05	0.05
Copper	mg/L	4	0	0	<0.003	<0.003	<0.003
Iron	mg/L	4	1	0	0.01	0.01	0.01
Manganese	mg/L	4	4	0	0.008	0.025	0.02
Zinc	mg/L	4	0	0	<0.06	<0.06	<0.06
Treated Water	1	l	ı		T		T
Nitrate	mg/L	3	3	0	15	15	15.00
Sulphate	mg/L	3	3	0	17	19	17.67
Fluoride	mg/L	3	3	0	0.05	0.06	0.05
pH (Lab)	-	3	3	0	6.33	7.16	6.69
Turbidity	NTU	3	3	0	1	2	1.33
Aluminium	mg/L	3	0	0	<0.03	0	#DIV/0!
Boron	mg/L	3	3	0	0.04	0.06	0.05
Copper	mg/L	3	2	0	0.003	0.004	0.00
Iron	mg/L	3	0	0	<0.01	<0.01	<0.01
Manganese	mg/L	3	0	0	<0.001	<0.001	<0.001
Zinc	mg/L	3	0	0	<0.06	<0.06	<0.06
Reticulated Water	,				·	•	1
Nitrate	mg/L	14	14	0	11	15	13.79
Sulphate	mg/L	14	14	0	5.5	18	10.49
Fluoride	mg/L	14	13	0	0.05	0.08	0.06
pH (Lab)	-	14	13	0	6.45	8.56	7.06
Turbidity	NTU	14	9	0	1	4	1.89
Aluminium	mg/L	14	0	0	<0.03	<0.03	<0.03
Boron	mg/L	14	8	0	0.03	0.05	0.04
Copper	mg/L	14	6	0	0.004	0.11	0.02
Iron	mg/L	14	6	0	0.01	0.02	0.02
Manganese	mg/L	14	1	0	0.001	0.001	0.001
Zinc	mg/L	14	0	0	<0.06	<0.06	<0.06
Pesticides/Herbicides Summary*	ug/L	0	-	-	.0.00	~0.00	\0.00



#### 4.5. Water Quality Data 2020/2021 - Scheme 3 Forrest Beach Water Supply

Table 4.7 - Water Quality Data with Drinking Water Quality Criteria 2020/2021 - Scheme 3 Forrest Beach Water Supply

Table 4.7 –Water Quality D	Unit	Total Number of Samples Taken	Number of samples parameter was detected.	Number of samples exceeding health guideline value	Min	Max	Average
Raw Water							
Nitrate	mg/L	3	3	0	1.2	3.8	2.27
Sulphate	mg/L	3	3	0	17	17	17.00
Fluoride	mg/L	3	3	0	0.06	0.06	0.06
pH (Lab)	-	3	3	0	6.27	7.02	6.54
Turbidity	NTU	3	3	1	2	16	7.33
Aluminium	mg/L	3	0	0	<0.03	<0.03	<0.03
Boron	mg/L	3	3	0	0.03	0.04	0.03
Copper	mg/L	3	0	0	<0.003	<0.003	<0.003
Iron	mg/L	3	1	0	0.01	0.01	0.01
Manganese	mg/L	3	3	0	0.032	0.037	0.04
Zinc	mg/L	3	0	0	<0.06	<0.06	<0.06
Treated Water	1		Ī		T	T	1
Nitrate	mg/L	4	4	0	5.5	7.2	6.18
Sulphate	mg/L	4	4	0	10	12	11.00
Fluoride	mg/L	4	4	0	0.05	0.06	0.06
pH (Lab)	-	4	4	0	6.64	7.62	6.99
Turbidity	NTU	4	3	0	2	4	2.67
Aluminium	mg/L	4	1	0	0.04	0.04	0.04
Boron	mg/L	4	4	0	0.02	0.03	0.02
Copper	mg/L	4	1	0	0.003	0.003	0.00
Iron	mg/L	4	4	1	0.11	0.49	0.25
Manganese	mg/L	4	3	0	0.0006	0.002	0.00
Zinc	mg/L	4	0	0	<0.06	<0.06	<0.06
Reticulated Water							•
Nitrate	mg/L	10	10	0	5.2	7.2	6.03
Sulphate	mg/L	10	10	0	11	13	12.00
Fluoride	mg/L	10	10	0	0.05	0.06	0.06
pH (Lab)	-	10	10	0	6.09	8.5	6.98
Turbidity	NTU	10	9	0	2	4	2.44
Aluminium	mg/L	10	3	0	0.03	0.03	0.03
Boron	mg/L	10	10	0	0.02	0.03	0.03
Copper	mg/L	10	2	0	0.003	0.01	0.01
Iron	mg/L	10	10	0	0.13	0.26	0.19
Manganese	mg/L	10	10	0	0.13	0.009	0.19
Zinc		10	0	0	<0.06	<0.06	<0.06
Pesticides/Herbicides Summary*	mg/L ug/L	0	-	-	\U.U0	<b>~0.06</b>	\U.U6

#### HINCHINBROOK SHIRE COUNCIL DRINKING WATER QUALITY MANAGEMENT PLAN 2020/2021 REPORT

### 5. DRINKING WATER QUALITY INCIDENTS

#### 5.1. Notice of Noncompliance with Water Quality Criteria

Under Section 102 in the Water Supply (Safety and Reliability) Act 2008 the drinking water service provider must, unless the provider has a reasonable excuse, immediately inform the regulator if the service provider becomes aware that the quality of water supplied from the provider's drinking water service does not comply with the water quality criteria relating to the service.

In the 2020/2021 financial year, Hinchinbrook Shire Council had one instance where the water supplied from Council's drinking water service did not comply with the water quality criteria for PFAS, therefore a notice was sent to the Water Supply Regulator. The non-compliance occurred on 16 December 2020. A copy of the non-compliance notification and investigation report is in Appendix A.

#### 5.2. Notice of Prescribed Incident

Under Section 102A in the Water Supply (Safety and Reliability) Act 2008 if the drinking water service provider becomes aware that a prescribed incident has happened in relation to the provider's service, they must, unless the provider has a reasonable excuse, immediately inform the regulator of the prescribed incident.

In the 2020/2021 financial year, Hinchinbrook Shire Council had instance where a boil water alert was issued, therefore a notice was sent to the Water Supply Regulator. The non-compliance occurred on 6 January 2021. A copy of the non-compliance notification and investigation report is in Appendix B.

### 6. WATER QUALITY COMPLAINTS

Hinchinbrook Shire Council has a Water and Sewerage Request System that allows direct logging of works requests to the Manager of Water and Sewerage for actioning and provides a basis for storing, checking the status of and reporting of all works request activities.

All approved maintenance work generated from the Request system, are prioritised and scheduled for completion. Once the request works has been completed, the person who had requested the works is contacted and informed about the works completed.

If the person who requested the works is not satisfied with the Council's response to the request, further contact can be made to Council with their concerns, which are then dealt with in accordance with Council's Complaints Procedure.

There are specified response timeframes, depending on the type and nature of the request.

Table 6.1 - Water Quality Complaints

Category	Request Lodged	Action Completed	Percentage Completed
Dirty Water	16	16	100%
Low Water Pressure	11	11	100%



#### HINCHINBROOK SHIRE COUNCIL DRINKING WATER QUALITY MANAGEMENT PLAN 2020/2021 REPORT

## 7. DWQMP AUDIT REPORT

Under Section 99 of the Water Supply (Safety and Reliability) Act 2008, regular audits of the approved Drinking Water Quality Management Plan are required. The first regular audit of the Hinchinbrook Shire Council's Drinking Water Quality Management Plan was conducted on 20<sup>th</sup> and 21<sup>st</sup> March 2017, and is required to be completed every four (4) years from that date.

The last regular audit of Hinchinbrook Shire Council's Drinking Water Quality Management Plan was completed on  $21^{st}$  May 2021. The results of this audit are summarised below.

Hinchinbrook Shire Council demonstrated a high level of compliance with the regular audit during the audit period. The overall summary of compliance for Hinchinbrook Shire Council can be seen in Table 7.1 below. Eleven (11) requirements were audited within the audit areas.

Table 7.1: Compliance Summary

Compliance Code	Number of Findings	
Compliant	С	11
Minor Non-Compliant	N	0
Major Non-Compliant	M	0

The audit concluded that HSC:

- Had adequate compliance between the current version of the DWQMP in use by HSC and the observations made during the audit.
- The DWQMP was found to be fully relevant, representing an accurate reflection of HSC's infrastructure and the way in which it operated.
- A number of opportunities for improvement were identified during the audit and may help improve efficiency, reliability or reduce the risk of future non-compliances.

## 8. DWQMP REVIEW

Under Sections 99 and 105 of the Water Supply (Safety and Reliability) Act 2008, regular reviews of the approved Drinking Water Quality Management Plan are required. The last review of Hinchinbrook Shire Council's Drinking Water Quality Management Plan was finalised on 25 March 2020. The next review of Hinchinbrook Shire Council's Drinking Water Quality Management Plan is required to be conducted by 25 March 2022. Further reviews are required to be completed every two years from that date.



## 9. APPENDIX A - NOTICE OF NONCOMPLIANCE

# Notification of a drinking water event or detection of a parameter with no water quality criteria



Water Supply (Safety and Reliability) Act 2008

Privacy Disclaimer: Collection of information provided in this form and any attachments is being used for the purpose of informing the Queensland Water Supply Regulator of a drinking water event or detection of a parameter with no water quality criteria. The Department of Energy and Water Supply will endeavour to maintain any confidentiality of information relating to your form. However, consideration of your form may involve consultation and if so, details of your form may be disclosed to third parties. This information will not otherwise be disclosed outside of the department unless required or authorised by law (e.g. as under the *Right to Information Act 2009*).

The information contained in this form is a requirement of a condition of an approved drinking water quality management plan. For further information see section 93 of the Water Supply (Safety and Reliability) Act 2008.

Important note: This form consists of two sections. The initial notification section (pages 1-4) and the investigation report section (pages 5-7). These sections are submitted separately to the regulator while dealing with a drinking water event or a parameter with no water quality criteria. Please refer to the Explanatory Notes and Instructions for Notification of a Drinking Water Event or Detection of a Parameter with no Water Quality Criteria for further information on completing this form.

#### Initial notification

This is the first section of the form and is to be completed and submitted as soon as practicable after becoming aware of a drinking water event or a parameter with no water quality criteria.

Drinking water service prov	vider			SPID
Hinchinbrook Shire Council				SP62
Drinking water scheme				
Scheme 2 - Lower Herber	t Water Supply			
Contact details for th	nis notification			
Principal Contact				
Family name	Given name(s)		Position	
Martin	Peter		Utility Service	es Manager
Postal address				
PO Box 366				
INGHAM QLD			Post	code 4850
Telephone number	Fax number	Mobile number		, , , , , , , , , , , , , , , , , , , ,
(07) 4776 4600	(07) 4776 3233	0417 143 224		
Email address				
pmartin@hinchinbrook.qle	d.gov.au			
pmartin@hinchinbrook.qld	d.gov.au  report to the regulator			
•				
	rted the event or the detection of a	parameter with no	water quality c	riteria
Peter R Martin				
Person reported to				
1300 596 709				
Date reported (dd/mm/yyyy)	Time reported (AM/PM	1)		

246			
Other communication —	ganisation/agency about this event or detection	on of a naramal	or with no water available
riteria?	ganisation/agency about this event of detection	on or a paramer	er with no water qualit
X Yes ☐ No			
Yes, provide other organisation/ac	gency contact details		
Organisation/agency			
Queensland Health			
Contact name	*		Date (dd/mm/yyyy)
Alison Crombie			16 / 12 / 2020
Telephone number	Email address		
( 07 ) 4433 6920	ALISON.CROMBIE@health.qld.gov.au		
Organisation/agency			
organisation/agency			
Contact name			Date (dd/mm/yyyy)
Jonact Hame			/ /
	Fasail address		, ,
Telephone number	Email address		
( )			
	· · ·	aluding the sire	impteness that agua
Describe the event or detection ise to the event or detection of event and the immediate impact	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling progr	d the immediate ram?	impact. What led to the
Describe the event or detection rise to the event or detection of event and the immediate impact	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection ise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection rise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake  Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
Describe the event or detection rise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake  Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to the
rise to the event or detection of event and the immediate impact PFAS/PFOS testing undertake Tests taken from 3 bores that s	of parameter with no water quality criteria; in a parameter with no water quality criteria and t? Was this part of the regular sampling program as part of testing regime	d the immediate ram?	impact. What led to

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mple information (if app	olicable)		
	Raw/source water Treated	water from water treatment pla	ant
Date taken (dd/mm/yyyy)  26 / 11 / 2020  Parameter (e.g. chlorate, emergi	Time taken (AM/PM) 8:44am		
PFAS/PFOS	ing pesticides)		
Sample location/s (e.g. High S	Street Reservoir, 56 Gray St Highsville or 0	Queen Street Water Treatment Plant)	
Results (e.g. mg/L, μg/L)			Date results received
0.03μg/L & 0.093μg/L			16 / 12 / 2020
Laboratory name where ana Forensic and Scientific Ser	alysis was undertaken or process vices	if own laboratory used	
if any public health r	actions been taken? ribe immediate corrective action taken notification has already taken place, on n reasons why immediate corrective a	n e.g. what corrective action took per will be required?	place, when it occurred and
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explair  Bore has been shutdown a	ribe immediate corrective action taker notification has already taken place, on reasons why immediate corrective a	n e.g. what corrective action took por will be required? action has not been taken	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explair  Bore has been shutdown a  Follow up samples have be	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an	n e.g. what corrective action took por will be required? action has not been taken	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explain  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explain  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an arried out.	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explain  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an arried out.  urred based on advice from Quee	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explair  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca  Public notification has occu	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an arried out.  urred based on advice from Quee	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explair  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca  Public notification has occur  (Additional information may be atta	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  een taken from within the bore an arried out.  urred based on advice from Quee	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	
Have immediate corrective a  Yes If Yes, please descr if any public health r  No If No, please explair  Bore has been shutdown a  Follow up samples have be retesting.  Mains flushing has been ca  Public notification has occu  (Additional information may be atta  Sllow up sample/s (if app.)  Have you taken follow up sample.	ribe immediate corrective action taken notification has already taken place, on reasons why immediate corrective and is no longer in use.  Been taken from within the bore an arried out.  Burred based on advice from Quee ached)	n e.g. what corrective action took por will be required? action has not been taken  d the reticulation system and h	

Notification of a drinking water event or detection of a parameter with no water quality criteria continued... page 3 of 7

6. Event or detection of a parameter with no water quality criteria information (continued...)

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**Reset Form** 

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# Notification of a drinking water event or detection of a parameter with no water quality criteria



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#### Investigation report

This is the second section of the form to be completed and submitted when the provider has identified the measures the provider will take to prevent the drinking water event in the future or manage the detected parameter with no water quality criteria.

Drinking water service pro	ovider		SPID
Hinchinbrook Shire Council			SP62
Drinking water scheme			
Scheme 2 - Lower Herbe	ert Water Supply		
. Contact details for	this notification		
Principal Contact			
Family name	Given name(s)		Position
Martin	Peter		Manager Water & Sewerage
Death address			
Postal address PO Box 366			
INGHAM QLD			Postcode 4850
Telephone number	Fax number	Mobile number	
(07) 4776 4600	(07) 4776 3233	0417 143 224	
Email address			
pmartin@hinchinbrook.q	ld.gov.au		
5			
iteria  ————————————————————————————————————	tification of event or dete	ection of a parame	ter with no water quality
iteria			
B	P / 4.45 L 20 L		. 07 . 0040
Date initial written notifica	ation (pages 1-4) was submitted	to the regulator	/ 07 / 2018
. Notification type 🗕			
☐ Event or		a parameter with no wat	

est taken from 10 sites throughout district.	
Samples were taken from both Raw Water Sources and the Reticulation	System.
See test results attached.	
dditional information may be attached)	
Corrective actions	
rovide evidence that demonstrates that the event has been resolved, or uality criteria is being managed.	the detection of a parameter with no wa
Macknade Bore 3 has been shutdown.	
lushing program has commenced for the Lower Herbert Water Supply.	
Council is working with the PFAS working group and Queensland Health	n.
Public Notification has issued by Council.	
dditional information may be attached)	
Preventative actions	
What additional measures have been, or will be, implemented to prevent low is, or will the detected parameter with no water quality criteria be made to the control of the	
Macknade Bore 3 will be shutdown until further notice.	
Monitoring program is being developed with assistance from Queenslar	nd Health

(Additional information may be attached)

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] Yes 🔀 No		
ovide additional information in	response to the above question.	
dditional information may be attached)		
	all the necessary and appropriate authority on behalf of the drinking	
nformation provided, are true and	on provided in this approved form, including any attachments or supped accurate to the best of my knowledge.	orting
formation provided, are true and amily name	d accurate to the best of my knowledge.  Given name(s)  Position	
formation provided, are true and amily name	d accurate to the best of my knowledge.  Given name(s)  Peter  Manager Water & S	
formation provided, are true and amily name  Martin  ignature	Given name(s) Peter Position Manager Water & S  Date (dd/mm/yyyy)	
formation provided, are true and amily name	d accurate to the best of my knowledge.  Given name(s)  Peter  Manager Water & S	
formation provided, are true and amily name Martin Ignature	Given name(s) Peter Position Manager Water & S  Date (dd/mm/yyyy)	
Iformation provided, are true and amily name  Martin  ignature  Submission	d accurate to the best of my knowledge.  Given name(s) Peter Position Manager Water & S  Date (dd/mm/yyyy)  17 / 07 / 2018	
Information provided, are true and amily name  Martin  Ignature  Submission  Please complete and sign the for aucensland Water Supply Regul	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  OR Facsimile: (07) 3405 3156	
formation provided, are true and amily name  Martin  Ignature  Submission  Lease complete and sign the for ueensland Water Supply Regule epartment of Energy and Water	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name Martin  gnature  Submission  ease complete and sign the for ueensland Water Supply Regule partment of Energy and Water D Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  OR Facsimile: (07) 3405 3156	Sewerage
cormation provided, are true and amily name lartin gnature  Submission —  ease complete and sign the for the partment of Energy and Water D Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
mily name lartin  gnature  Bubmission  ease complete and sign the for the partment of Energy and Water D Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name Martin  gnature  Submission  ease complete and sign the for ueensland Water Supply Regule partment of Energy and Water O Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name  Martin  gnature  Submission  ease complete and sign the for ueensland Water Supply Regule partment of Energy and Water O Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name  Martin  gnature  Submission  lease complete and sign the for ueensland Water Supply Regulepartment of Energy and Water O Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name Martin  gnature  Submission  ease complete and sign the for ueensland Water Supply Regule partment of Energy and Water O Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name Martin  gnature  Submission  ease complete and sign the for ueensland Water Supply Regule partment of Energy and Water O Box 15456	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerage
formation provided, are true and amily name  Martin  ignature  Submission  lease complete and sign the for	Given name(s) Peter  Date (dd/mm/yyyy)  17 / 07 / 2018  Position  Manager Water & S  Position  Manager Water & S  Pate (dd/mm/yyyy)  17 / 07 / 2018	Sewerag

Notification of a drinking water event or detection of a parameter with no water quality criteria continued... page 7 of 7

Form WSR507

V02 Dec 2013

Queensland Water Supply Regulator

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# Notification of a drinking water event or detection of a parameter with no water quality criteria



Water Supply (Safety and Reliability) Act 2008

Privacy Disclaimer: Collection of information provided in this form and any attachments is being used for the purpose of informing the Queensland Water Supply Regulator of a drinking water event or detection of a parameter with no water quality criteria. The Department of Energy and Water Supply will endeavour to maintain any confidentiality of information relating to your form. However, consideration of your form may involve consultation and if so, details of your form may be disclosed to third parties. This information will not otherwise be disclosed outside of the department unless required or authorised by law (e.g. as under the *Right to Information Act 2009*).

#### Investigation report

This is the second section of the form to be completed and submitted when the provider has identified the measures the provider will take to prevent the drinking water event in the future or manage the detected parameter with no water quality criteria.

Drinking water service provide	der		SF	PID
Hinchinbrook Shire Council			S	SP62
Drinking water scheme			Consideration of the Constitution of the Const	
Scheme 2 - Lower Herbert				
2. Contact details for th	nis notification			
Principal Contact				
Family name	Given name(s)		Position	
Martin	Peter		Utility Services	Manager
Postal address				
PO Box 366				MARKATA 100 110 000 000 000 000 000 000 000 00
INGHAM QLD			Posto	code 4850
Telephone number	Fax number	Mobile number		
(07) 4776 4600	(07) 4776 3233	0417 143 224		
	(01)			
Email address				
pmartin@hinchinbrook.qld.	gov.au 			
	fication of event or detec	tion of a parame	er with no wa	ter qualit
riteria				
Data initial written natification	on (negge 1 4) was submitted to	the regulator 19	/ 12 / 2020	
Date initial written notinication	on (pages 1-4) was submitted to	the regulator	/ 12 / 2020	ı
4. Notification type —				Riving Service Control Control
☐ Event or	□ Detection of a p	parameter with no wat	er quality criteria	

5. Investigation actions and outcomes
What actions were taken to investigate the event or the detection of a parameter with no water quality criteria? What were the outcomes?
Test taken from 6 sites throughout the Lower Herbert Scheme.
Samples were taken from both Raw Water Sources and the Reticulation System.
See test results attached.
(Additional information may be attached)
6. Corrective actions
Provide evidence that demonstrates that the event has been resolved, or the detection of a parameter with no water
quality criteria is being managed.
Macknade Bore 4 has been shutdown and is no longer in use.
Flushing program was carried out for the Lower Herbert Water Supply.
Public Notification was issued by Council.
(Additional information may be attached)
7. Preventative actions
What additional measures have been, or will be, implemented to prevent the event from occurring in the future? How is, or will the detected parameter with no water quality criteria be managed?
Macknade Bore 4 will be shutdown until further notice.
Bimonthly testing to be carried out.
(Additional information may be attached)

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Notification of a drinking water event or detection	on of a parameter with no water quality crite	eria continued page 7 of 7
17. Preventative actions (continued)		
Are these preventative measures refle	cted in the approved drinking water o	quality management plan?
☐ Yes ☒ No		
Provide additional information in respo	onse to the above question.	
(Additional information may be attached)		
18. Declaration		
I declare and warrant that I have all the provider to declare the information pro information provided, are true and acc	ovided in this approved form, including	ty on behalf of the drinking water service g any attachments or supporting
Family name	Given name(s)	Position
Martin	Peter	Manager Water & Sewerage
Signature	Date (dd/mm/yyyy)	
(Mende	22 / 02 / 2021	
19. Submission ————		
Please complete and sign the form an	d send to:	
Queensland Water Supply Regulator	OR Facsimile: (07) 3	405 3156
Department of Energy and Water Sup PO Box 15456 City East Qld 4002	· ·	√ater.Reporting@dews.qld.gov.au
	t Form Reset	
Prin	t Form Reset	FUIII

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## 10. APPENDIX B - NOTICE OF NONCOMPLIANCE

## Notification of a Drinking Water Event or detection of a parameter with no water quality criteria



Water Supply (Safety and Reliability) Act 2008

**Privacy notice:** Personal information on this form is being collected for the purpose of notifying the water supply regulator of a drinking water event or detection of a parameter with no water quality criteria. Your personal information will not be otherwise disclosed to any other parties without your consent unless authorised or required by law, such as under the Right to Information Act 2009 or the Evidence Act 1977. Further information about privacy is available on the department's website: <a href="https://www.dnrme.qld.gov.au">www.dnrme.qld.gov.au</a>.

The information contained in this form is a requirement of a condition of an approved drinking water quality management plan. For further information see section 93 of the Water Supply (Safety and Reliability) Act 2008.

Important note: This form consists of two sections. The initial notification section made up of pages 1 – 4 and the investigation report section pages 5 - 7. These sections are submitted separately to the regulator while dealing with a drinking water event or a parameter with no water quality criteria. Please refer to the Explanatory Notes and Instructions for Notification of a Drinking Water Event or Detection of a Parameter with no Water Quality Criteria for further information on completing this form.

#### Initial notification

This is the first section of the form and is to be completed and submitted as soon as practicable after becoming aware of a drinking water event or a parameter with no water quality criteria.

<ol> <li>Drinking water service pr</li> </ol>	ovider details			
Drinking water service provider				SPID
Drinking water scheme				
2. Contact details for this no Principal Contact	otification			
Family name	Given names(s)	Position		
Registered / business physical a	address	City / Town	State	Postcode
Mailing address (if different from	n above)	City / Town	State	Postcode
Telephone number	Mobile number	Email address		
3. Details of telephone repo	rt to the regulator			
Name of person who reported the	ne noncompliance			
Person reported to				
Date reported (dd/mm/yyyy)	Time reported (AM/PM)			

4. Notification ty	pe			
Event	or		Detection of a parameter with no	water quality criteria
5. Other commu	nication			
Have you informed a criteria?	ny other organisation	/ agency about	this event or detection of a param	eter with no water quality
☐ Yes ☐ No				
If Yes; other organisa	ation/agency contact	details		
Organisation / ag	ency			
Contact name				Date (dd / mm / yyyy)
Telephone number	er	Email address	3	
Organisation / ag	ency			
Contact name				Date (dd / mm / yyyy)
Telephone number	er	Email address	3	
to the event or detect and the immediate im	ion of a parameter w	ith no water qua	er quality criteria; including the circ ality criteria and the immediate imp ampling program?	act. What led to the event
(Additional information	n may be attached)			

6.	Event or	detection of a paramete	er with no water qu	ality crit	eria information	(continued)
Sa	ample inf	ormation (if applicable)_				
	Initial sa	mple				
	System lo	ocation	☐ Raw/source water ☐ Transmission		ed water from water tulation	treatment plant
	Date take	en	Time taken (AM /	PM)		
	/	/				
	Paramete	er (e.g. chlorate, emerging pes	sticides)			
	Sample I	ocation/s (e.g. High Street Reservoi	r, 56 Gray St Highsville or Que	en Street W	ater Treatment Plant)	
	Results (	e.g. mg/L, μg/L)		Date res	sults received	
				,	′ /	
	Laborato	ry name where analysis was u	ndertaken or process if c	own labora	tory used	
7		de la constitución en el con				
		te investigation and con ate corrective actions been t				
Пс	ave illilledi	are corrective actions been t	aken :			
		f <b>Yes,</b> please describe immedi				
	□No I	f <b>No</b> , please explain reasons w	hy immediate corrective	action ha	s not been taken.	
(,	Additional info	rmation may be attached)				
	Follow up	sample/s (if applicable)				
	Have you ta	aken follow up sample/s? (This r	must include a sample from the	e initial location	on)	
	☐ Yes	If Yes, expected timeframe for	or receipt of results		Date (dd / mm / yyyy)	Time AM / PM
					1 1	
	☐ No	If <b>No</b> , expected timeframe fo	r follow up sample(s) to b	be taken	Date (dd / mm / yyyy)	Time AM / PM
					/ /	

3. F	urther action	
И	hat further action will be taken? (Additional information may be attached	d)
(Ad	ditional information may be attached)	
. <i>D</i>	eclaration	
rovid	re and warrant that I have all the necessary and appropriate autler to declare the information provided in this form, including any ed, are true and accurate to the best of my knowledge.	hority on behalf of the drinking water service attachments or supporting information
Ea	mily name Given name(s)	Position
Га	mily hame Given hame(s)	FUSITION
Si	gnature	Date (dd / mm / yyyy)
A	of the second se	/ /
0. S	ubmission	
	e complete and sign the form and send via email at drinkingwate	or reporting@dorme.gld.gov.au
ricas	e complete and sign the form and send via email at difficing water	er.reporting@dnime.qid.gov.au
emind ou hav	er: Pages 5-7 must be completed and submitted to the regulator following your in dentified the measures you will take to prevent the event in the future.	investigation. Before submitting these pages, make sure

## Notification of a drinking water event or detection of a parameter with no water quality criteria



Water Supply (Safety and Reliability) Act 2008

Privacy notice: Personal information on this form is being collected for the purpose of notifying the water supply regulator of a drinking water event or detection of a parameter with no water quality criteria. Your personal information will not be otherwise disclosed to any other parties without your consent unless authorised or required by law, such as under the Right to Information Act 2009 or the Evidence Act 1977. Further information about privacy is available on the department's website:

www.dnrme.qld.qov.au.

#### **Investigation report**

This is the second section of the form and is to be completed and submitted when the provider has identified the measures the provider will take to prevent the drinking water event in the future or manage the detected parameter with no water quality criteria.

Drinking water service pro	ovider			SPID
Hinchinbrook Shire Council				SP62
Drinking water scheme				
Scheme 2 - Lower Herbert W	ater Supply			
GONETHE Z LOWER FIGHBERT W	ater Supply			
Contact data:la fav.	4bin ma4ifinadian			
Contact details for t	inis notification			
ncipal Contact				
Family name	Given names(s)	Position		
Martin	Peter	Utility Services N	/lanager	
		446		
Registered / business phy	City / Town	State	Postcode	
25 Lannercost Street	Ingham	QLD	4850	
Mailing address (if differe	City / Town	State	Postcode	
PO Box 366		Ingham	QLD	4850
Telephone number	Mobile number	Email address	3	
(07) 4776 4600	0417 143 224	pmartin@hinchir	nbrook.gld.gov.a	ıu
Details of initial not criteria	ification of event or dete	ection of a parame	eter with no	water qualit
ate initial written notificatio	n (pages1–4) was submitted to	the regulator	06	6 / 01 / 2021
Notification type				

What actions were taken to investigate the event or the detection of a parameter with no water quality criteria?  What were the outcomes?  Samples were taken from both the treated and reticulation systems  See test results attached  [Additional information may be attached]  Accorrective actions_  Provide evidence that demonstrates that the event has been resolved, or the detection of a parameter with no water uselty criteria is being managed.  Pump has been repaired and is now operational again.  Public notification issued by Council and boil water alert lifted.  (Additional information may be attached)  7. Preventative actions	5. Investigation actions and outcomes	
Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?	Vhat actions were taken to investigate the event or the detection of a parameter with Vhat were the outcomes?	no water quality criteria?
rovide evidence that demonstrates that the event has been resolved, or the detection of a parameter with no water uality criteria is being managed.  Pump has been repaired and is now operational again.  Public notification issued by Council and boil water alert lifted.  (Additional information may be attached)  That additional measures have been, or will be, implemented to prevent the event from occurring in the future? How is, or will the detected parameter with no water quality criteria be managed?  Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?		
Pump has been repaired and is now operational again.  Public notification issued by Council and boil water alert lifted.  (Additional information may be attached)  Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?	(Additional information may be attached)	
Pump has been repaired and is now operational again.  Public notification issued by Council and boil water alert lifted.  (Additional information may be attached)  Preventative actions  That additional measures have been, or will be, implemented to prevent the event from occurring in the future? How, or will the detected parameter with no water quality criteria be managed?  Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  Were these preventative measures reflected in the approved Drinking water quality management plan?	Corrective actions	10 THE STATE OF THE
Public notification issued by Council and boil water alert lifted.  (Additional information may be attached)  Preventative actions  That additional measures have been, or will be, implemented to prevent the event from occurring in the future? How, or will the detected parameter with no water quality criteria be managed?  Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?	rovide evidence that demonstrates that the event has been resolved, or the detectionality criteria is being managed.	on of a parameter with no water
(Additional information may be attached)  Preventative actions  That additional measures have been, or will be, implemented to prevent the event from occurring in the future? How, or will the detected parameter with no water quality criteria be managed?  Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?	Pump has been repaired and is now operational again.	
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Arranged for a local Council worker to be able to inspect plant and undertake minor repairs.  Under normal circumstances Council operators would helicopter in to site but due to weather conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?		
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conditions this was not possible. Operators were boated to site when possible.  (Additional information may be attached)  Are these preventative measures reflected in the approved Drinking water quality management plan?	Arranged for a local Council worker to be able to inspect plant and	undertake minor repairs.
Are these preventative measures reflected in the approved Drinking water quality management plan?		
		anagement plan?
(Additional information may be attached)		

-		
8	Declaration	
0.	Dediai ation_	

I declare and warrant that I have all the necessary and appropriate authority on behalf of the drinking water service provider to declare the information provided in this form, including any attachments or supporting information provided, are true and accurate to the best of my knowledge.

Family name	Given name(s)	Position
Martin	Peter	Utility Services Manager
Signature @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @		Date (dd / mm / yyyy)
		22 / 02 /2021

## 9. Submission\_\_\_\_\_

Please complete and sign the form and send via email at <a href="mailto:drinkingwater.reporting@dnrme.qld.gov.au">dnrme.qld.gov.au</a>