# **NOTICE OF MEETING**

Dear Committee Members You are requested to attend the following meeting of Council.

WATER AND WASTE STANDING COMMITTEE MEETING OF ISAAC REGIONAL COUNCIL

PAGE 1

TO BE HELD ON WEDNESDAY, 21 FEBRUARY 2024 COMMENCING AT 1.00PM COUNCIL CHAMBERS - MORANBAH

KEN GOULDTHORP Chief Executive Officer

# SCOTT CASEY

Committee Officer Director Water and Waste Committee Members: Cr Simon West (Chair) Mayor Anne Baker Cr Greg Austen Cr Kelly Vea Vea Cr Carolyn Franzmann



Document title – 00.00.0000

#### Local Government Regulation 2012

#### Chapter 8, Part 2 Local Government Meetings and Committees

#### Division 1A, Requirements for Local Government Meetings Generally

#### Section 254J Closed meetings

- (1) A local government may resolve that all or part of a meeting of the local government be closed to the public.
- (2) A committee of a local government may resolve that all or part of a meeting of the committee be closed to the public.
- (3) However, a local government or a committee of a local government may make a resolution about a local government meeting under subsection (1) or (2) only if its councillors or members consider it necessary to close the meeting to discuss one or more of the following matters—
  - (a) the appointment, discipline or dismissal of the chief executive officer;
  - (b) industrial matters affecting employees;
  - (c) the local government's budget;
  - (d) rating concessions;
  - (e) legal advice obtained by the local government or legal proceedings involving the local government including, for example, legal proceedings that may be taken by or against the local government;
  - (f) matters that may directly affect the health and safety of an individual or a group of individuals;
  - (g) negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government;
  - (h) negotiations relating to the taking of land by the local government under the *Acquisition of Land Act 1967*;
  - (i) a matter the local government is required to keep confidential under a law of, or formal arrangement with, the Commonwealth or a State.
- (4) However, a local government or a committee of a local government must not resolve that a part of a local government meeting at which a decision mentioned in <u>section</u> <u>150ER(2)</u>, <u>150ES(3)</u> or <u>150EU(2)</u> of the <u>Act</u> will be considered, discussed, voted on or made be closed.
- (5) A resolution that a local government meeting be closed must—
  - (a) state the matter mentioned in subsection (3) that is to be discussed; and
  - (b) include an overview of what is to be discussed while the meeting is closed.
- (6) A local government or a committee of a local government must not make a resolution (other than a procedural resolution) in a local government meeting, or a part of a local government meeting, that is closed.

#### Section 254K Participating in meetings by audio link or audio visual link

- (1) A local government may allow a person to take part in a meeting of the local government by audio link or audio visual link.
- (2) A committee of a local government may allow a person to take part in a meeting of the committee by audio link or audio visual link.
- (3) A councillor or committee member who takes part in a local government meeting under subsection (1) or (2) is taken to be present at the meeting if the councillor or member was simultaneously in audio contact with each other person at the meeting.
- In this section—
   audio link see the <u>Evidence Act 1977</u>, <u>section 39C</u>.
   audio visual link see the <u>Evidence Act 1977</u>, <u>schedule 3</u>.

#### **Conflict of Interest Obligations**

Reference is made to Section 150EL of the Local Government Act 2009. Specifically, the obligation of Councillors when they first become aware they have a conflict of interest to make the Chief Executive Officer aware in writing or if in a meeting, ensure they declared in a first become aware they declared in the conflict of interest to make the Chief Executive Officer aware in writing or if in a meeting, ensure they declared in the conflict of interest to make the Chief Executive Officer aware in writing or if in a meeting, ensure they declared in the conflict of the





# STANDING COMMITTEE MEETING

### OF ISAAC REGIONAL COUNCIL

# TO BE HELD ON

# WEDNESDAY 21 FEBRUARY 2024

# **COUNCIL CHAMBERS, MORANBAH**

- 1. OPENING OF THE MEETING
  - 1.1 ACCEPTANCE OF PARTICIPATION BY VIDEO CONFERENCE
- 2. APOLOGIES AND LEAVE OF ABSENCES
- 3. DECLARATION OF CONFLICTS OF INTEREST
- 4. CONFIRMATION OF MINUTES
- 5. OFFICER REPORTS
- 6. INFORMATION BULLETIN REPORT
- 7. GENERAL BUSINESS
- 8. CONCLUSION



# **TABLE OF CONTENTS**



# 1. OPENING OF MEETING

# 2. APOLOGIES

# 3. DECLARATION OF CONFLICTS OF INTEREST

# 4. CONFIRMATION OF MINUTES

Water and Waste Standing Committee Meeting of Isaac Regional Council held in Council Chambers, Moranbah, commencing at 9.00am on Wednesday 8 November 2023.

# 5. OFFICER REPORTS

# 5.1

# WATER AND WASTE 2023/2024 CAPITAL PROJECTS PROGRESS REPORT

#### **EXECUTIVE SUMMARY**

This report is to provide an update to the Water and Waste Standing Committee and Council of the progress in the delivery of the Water and Waste 2023/2024 Capital Works Program.

# 5.2

# WATER QUALITY INVESTIGATION ACTION PLAN UPDATE

f Isaacregionalcouncil

isaacregionalcouncil

isaacrcounci

# **EXECUTIVE SUMMARY**

The purpose of this report is to present to Council a report for the Water Quality Reliability Investigation Action Plan Deliverables.

PAGE 4

#### ISAAC.QLD.GOV.AU

ISAAC REGIONAL COUNCIL ABN 39 274 142 600

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD 4744

# **TABLE OF CONTENTS**



# 6. INFORMATION BULLETIN

6.1

WATER AND WASTE INFORMATION BULLETIN – FEBRUARY 2024

#### **EXECUTIVE SUMMARY**

The Water and Waste Directorate Information Bulletin for February 2024 is provided for Committee review.

7. GENERAL BUSINESS

8. CONCLUSION

ISAAC.QLD.GOV.AU

ISAAC REGIONAL COUNCIL ABN 39 274 142 600



# **UNCONFIRMED MINUTES**

WATER AND WASTE STANDING COMMITTEE MEETING OF ISAAC REGIONAL COUNCIL

HELD ON WEDNESDAY, 8 NOVEMBER 2023 COMMENCING AT 1.00PM







#### **ISAAC REGIONAL COUNCIL**

# **UNCONFIRMED MINUTES OF THE**

# WATER AND WASTE

# **STANDING COMMITTEE MEETING**

# HELD IN COUNCIL CHAMBERS, MORANBAH

### **ON WEDNESDAY 8 NOVEMBER 2023**

Та	Table of Contents		
1.	Opening	3	
2.	Apologies and Leave of Absences	3	
3.	Declaration of Conflicts of Interest	4	
4.	Confirmation of Minutes	4	
5.	Officer Reports	5	
6.	Information Bulletin Reports	10	
7.	General Business	11	
8.	Conclusion	12	

#### ISAAC.QLD.GOV.AU

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD 4744 F isaacregionalcouncil PAGE 7







# **ISAAC REGIONAL COUNCIL**

#### **UNCONFIRMED MINUTES OF THE**

#### WATER AND WASTE

#### **STANDING COMMITTEE MEETING**

#### HELD IN COUNCIL CHAMBERS, MORANBAH

#### **ON WEDNESDAY 8 NOVEMBER 2023 COMMENCING AT 1.00PM**

ATTENDANCECr Simon West, Division Four (Chair)<br/>Cr Greg Austen, Division One (By Video Conference)<br/>Cr Carolyn Franzmann, Division Six (By Video Conference)<br/>Cr Sandy Moffat, Division Two (By Video Conference)<br/>Cr Viv Coleman, Division Eight (By Video Conference)

**OFFICERS PRESENT**Mr Scott Casey, Director Water and Waste<br/>Mr Karl Murdoch, Manager Waste Services (By Video Conference)<br/>Mr Stephen Wagner, Manager Operations and Maintenance<br/>Mrs Zoe Behrendt, Acting Manager Business Services<br/>Mr Amal Meegahawattage, Manager Planning and Projects<br/>Ms Natalie Sullivan, Operations and Maintenance Technical Support Officer (By<br/>Video Conference)<br/>Mrs Tricia Hughes, Coordinator Executive Support, Office of the Mayor and Chief<br/>Executive Officer

#### 1. OPENING

The Chair declared the meeting open at 1.03pm and acknowledged the traditional custodians of the land on which we meet today and paid his respects to their Elders past, present and emerging.

Cr Greg Austen was not in attendance at the commencement of the meeting.

#### 2. APOLOGIES AND LEAVE OF ABSENCES

A leave of absence be granted for Mayor Anne Baker and Cr Kelly Vea Vea for this meeting as they were attending meetings with State Government officials on behalf of Council.









Resolution N	o.:	W&W0470		
Moved:	Cr West		Seconded:	Cr Franzmann
and Cr Kelly	That the Water and Waste Standing Committee grants a leave of absence for Mayor Anne Baker and Cr Kelly Vea Vea for this meeting as they were attending meetings with State Government officials on behalf of Council.			
				Carried
Resolution N	o.:	W&W0471		
Moved:	Cr West		Seconded:	Cr Franzmann
		-	-	y Moffat and Cr Viv Coleman as nding Committee Meeting.
				Carried

# **3. DECLARATION OF CONFLICTS OF INTEREST**

No conflict of interests declared this meeting.

NOTE:

Council acknowledges that Chapter 5B Councillors' Conflicts of Interest of the Local Government Act 2009 does not apply to a Councillor if the matter to be resolved relates to a corporation or association that arises solely because of a nomination or appointment of the councillor by the local government to be a member of the board of the corporation or association.



<b>MEETING MINUTES</b>
------------------------



### 4. CONFIRMATION OF MINUTES

Confirmation of minutes from Water and Waste Standing Committee Meeting of Isaac Regional Council held at Council Chambers, Moranbah on Wednesday 11 October 2023.

Resolution N	o.:	W&W0472		
Moved:	Cr Franzman	n	Seconded:	Cr Coleman
That the minutes from the Water and Waste Standing Committee meeting held in Council Chambers, Moranbah on Wednesday 11 October 2023 are confirmed.				
				Carried

ATTENDANCE

Cr Greg Austen video conferenced into the meeting at 1.05pm.

# **5. OFFICERS REPORTS**

# 5.1 Water and Waste Directorate 2023/2024 Capital Projects Progress Report – October 2023

# **EXECUTIVE SUMMARY**

This report is to provide an update to the Water and Waste Standing Committee and Council on the progress of the delivery of the Water and Waste Directorate 2023/2024 Capital Works Program.

# OFFICER'S RECOMMENDATION

# That the Committee recommends that Council:

1. Receives and notes the monthly Water and Waste 2023/2024 Capital Projects Progress Summary Report.







**Resolution No.:** W&W0473 Moved: **Cr Franzmann** Seconded: **Cr Moffat** That the Committee recommends that Council: 1. Receives and notes the monthly Water and Waste 2023/2024 Capital Projects Progress Summary Report. Carried NOTES:

CW222983 - CLM TCD FLOATING OFF-TAKE STRUCTURE - Cr Austen and Cr Coleman have requested a meeting (and Background Information Report including designs) to discuss the design for the Theresaa Creek Floating Off-Take Structure.

#### 5.2 Exception Based Contractual Arrangements – *Local Government Regulations* (2012)

# **EXECUTIVE SUMMARY**

The purpose of this report is to seek retrospective endorsement for the Independent National Association of Testing Authorities (NATA) affiliated testing required as per contract IRCT-MBH-1022-301 provided through TRI Australasia Pty Ltd, under the exception provisions for entering into medium or large sized contractual arrangements within s235(b) of the Local Government Regulations 2012.

# **OFFICER'S RECOMMENDATION**

# That the Committee recommends that Council:

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD\_4744\_

- 1. Resolves that while Council is responsible for the independent National Association of Testing Authorities (NATA) accredited testing for the Moranbah Waste Management Facility Construction of Lined Landfill Cell#2 IRCT-MBH-1022-301 project in Moranbah, it is satisfied that because of the nature of the specialised testing and location of TRI Australasia Pty Ltd chosen by the Contract Superintendent, it would be impractical or disadvantageous for the local government to invite quotes from other suppliers.
- 2. Retrospectively endorses the following exception to enter into a medium or large sized contractual arrangement as per s235 of the Local Government Regulations (2012) for the National Association of Testing Authorities (NATA) accredited testing as per quote Q23-187 dated 31 August 2023 conducted by TRI Australasia Pty Ltd and other Quality Assurance (QA) invoices from the company expected for this project.

PAGE 11



Resolution No.: W&W0474 Moved: Cr Franzmann Seconded: Cr West

That the Committee recommends that Council:

- 1. Resolves that while Council is responsible for the independent National Association of Testing Authorities (NATA) accredited testing for the Moranbah Waste Management Facility Construction of Lined Landfill Cell#2 IRCT-MBH-1022-301 project in Moranbah, it is satisfied that because of the nature of the specialised testing and location of TRI Australasia Pty Ltd chosen by the Contract Superintendent, it would be impractical or disadvantageous for the local government to invite quotes from other suppliers.
- 2. Retrospectively endorses the following exception to enter into a medium or large sized contractual arrangement as per s235 of the *Local Government Regulations (2012)* for the National Association of Testing Authorities (NATA) accredited testing as per quote Q23-187 dated 31 August 2023 conducted by TRI Australasia Pty Ltd and other Quality Assurance (QA) invoices from the company expected for this project.

Carried

# 5.3 Glenden Proposed Change to Waste Collection Days

# **EXECUTIVE SUMMARY**

The purpose of this report is to seek approval to amend waste and recycling collection days in part of Glenden.

# **OFFICER'S RECOMMENDATION**

That the Committee recommends that Council:

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD\_4744

1. Approves the change of regular waste and recycling collection day from Tuesday to Wednesday for approximately 200 properties in Glenden, with affect from week commencing Monday 1 July 2024.





Resolution No.: W&W0475

Moved: Cr Austen Seconded: Cr Coleman

That the Committee recommends that Council:

1. Approves the change of regular waste and recycling collection day from Tuesday to Wednesday for approximately 200 properties in Glenden, with affect from week commencing Monday 1 July 2024.

Carried

# 5.4 Integrated Management System Certification Update

#### EXECUTIVE SUMMARY

The purpose of this report is to provide an update on the Water and Waste Integrated Management System (IMS) certification and compliance with ISO Standards of Occupational Health and Safety, Environment and Quality.

# **OFFICER'S RECOMMENDATION**

That the Committee recommends that Council:

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD 4744

1. Notes the outcomes of the Water and Waste Integrated Management System Audit Report following an external surveillance audit in June 2023.

Resolution	No.:	W&W0476		
Moved:	Cr Franzma	າກ	Seconded:	Cr Austen
That the Co	ommittee recon	nmends that Council	:	
1. Notes the outcomes of the Water and Waste Integrated Management System Audit Report following an external surveillance audit in June 2023.				
				Carried

ISAAC.QLD.GOV.AU





PROCEDURAL MOTION:				
Resolution No.:	W&W0477			
Moved: Cr Franzman	Seconded	: Cr Austen		
That the Committee closes the meeting to the public at 1.52pm under <i>Local Government Regulations</i> 2012 Section 254J (3)(g) to deliberate on Confidential Report 5.5 Annual Review of Waste Collection Contract.				
		Carried		

PROCEDURA	L MOTION:				
Resolution No	o.:	W&W0478			
Moved:	Cr Coleman		Seconded:	Cr Austen	
That the Com	mittee open t	he meeting at 2.05pm.			
					Carried

# **CONFIDENTIAL REPORT**

Closed under 254J(3) (g) negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government

# 5.5 Annual Review of Waste Collection Contract

# **EXECUTIVE SUMMARY**

This report provides a review of the performance of the Waste and Recycling Collection Contract IRC/CHRC2083-0119-138 over the twelve (12) months from November 2022 to October 2023, and provides a recommendation on the future of the contract.

#### ISAAC.QLD.GOV.AU

ISAAC REGIONAL COUNCIL ABN 39 274 142 600





y isaacrcouncil



# **OFFICER'S RECOMMENDATION**

That the Committee recommends that Council:

- 1. Notes the content of the report on the annual review of the performance of the Waste and Recycling Collection Contract IRC/CHRC2083-0119-138; and
- 2. Resolves to not extend the Waste and Recycling Collection Contract IRC/CHRC2083-0119-138 beyond its end date of 5 October 2026; and
- 3. Resolves to instruct the Chief Executive Officer to procure a new Waste and Recycling Collection Contract with a commencement date of 6 October 2026.

Resolution	on No.:	W&W0479			
Moved:	Cr Franzma	nn	Seconded:	Cr Austen	
That the	That the Committee recommends that Council:				
	Notes the content of the report on the annual review of the performance of the Waste and Recycling Collection Contract IRC/CHRC2083-0119-138; and				
	Resolves to not extend the Waste and Recycling Collection Contract IRC/CHRC2083-0119-13 beyond its end date of 5 October 2026; and			n Contract IRC/CHRC2083-0119-138	
		ct the Chief Executiv with a commencemen	-	ocure a new Waste and Recycling per 2026.	

Carried

# 6. INFORMATION BULLETIN REPORTS

#### 6.1

# Water and Waste Information Bulletin – November 2023

# **EXECUTIVE SUMMARY**

The Water and Waste Directorate Information Bulletin for November 2023 is provided for Committee review.

PAGE 15



P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD 4744



# **OFFICER'S RECOMMENDATION**

That the Committee recommends that Council:

1. Notes the Water and Waste Directorate Information Bulletin for November 2023.

Resolution No.:	:	W&W0480		
Moved:	Cr Moffat	Seconded:	Cr Coleman	
That the Committee:				
1. Notes the	Water and	Waste Directorate Information Bul	letin for November 2023.	
			Cá	arried

# 7. GENERAL BUSINESS

# 7.1 Water Restrictions – St Lawrence and Carmila

The Director Water and Waste provided a briefing to the Committee on the Water Restrictions for St Lawrence and Carmila which will come into effect from midnight Thursday 9 November 2023. Public Notices will be sent out to Community and Carmila residences will receive the flyer through the Carmila Post Office as this is Level 2 Water Restrictions.

# 7.2 Leaking Wall Weir – St Lawrence

Cr Viv Coleman advised that the St Lawrence Weir Wall is leaking and requested that this be investigated.

# ACTION: DIRECTOR WATER AND WASTE

isaacregionalcouncil

isaacrcouncil

# 7.3 Fee Enquiry – Disposing of Power Poles

Cr Greg Austen asked for an update on the Fee Enquiry for disposing of Power Poles. The Manager Waste Services advised that the request is being considered and requested that Cr Austen provide the contact details for the business that raised the enquiry with Cr Austen.

PAGE 16

ISAAC.QLD.GOV.AU

ISAAC REGIONAL COUNCIL ABN 39 274 142 600

P 1300 472 227 F 07 4941 8666 A PO Box 97 Moranbah QLD\_4744



# 8. CONCLUSION

There being no further business, the Chair declared the meeting closed at 2.20pm.

These minutes will be confirmed by the Committee at the Water and Waste Standing Committee Meeting to be held in February 2024 in Moranbah.

..... CHAIR

...../...../..... DATE

ISAAC.QLD.GOV.AU

ISAAC REGIONAL COUNCIL ABN 39 274 142 600





MEETING DETAILS	Water and Waste Standing Committee Wednesday 21 February 2024
AUTHOR	Amal Meegahawattage
AUTHOR POSITION	Manager Planning and Projects

#### 5.1

# WATER AND WASTE 20232024 CAPITAL PROJECTS PROGRESS REPORT

# EXECUTIVE SUMMARY

This report aims to update the Water and Waste Standing Committee and Council on the advancements in the Water and Waste 2023/2024 Capital Works Program.

# **OFFICER'S RECOMMENDATION**

That the Committee recommends that Council:

1. Receives and notes the monthly Water and Waste 2023/2024 Capital Projects Progress Summary Report.

#### BACKGROUND

Regular updates on the financial and physical status of projects within the 2023/24 Water and Waste Capital Works program are crucial to keep Council informed about the program's progress and associated risks.

#### IMPLICATIONS

The attached Water and Waste 2023/24 Capital Projects Progress Summary provides an overview of the financial and physical status of all projects, with red indicating a projected cost overrun of over 10% or completion after January 2024, yellow indicating a cost overrun of 0-10%, and green indicating no issues. Brief commentary is provided to explain the status of each project.

#### Compliance

Compliance with the Water and Waste 2023/24 Capital Works Program is essential to meet the identified timeframes of the 2023/24 financial year.

#### **Key Capital Projects**

#### CW222974 – CORP Sewer Relining

Awarded in September 2023, this project is progressing well. CCTV camera works for Dysart and Moranbah are completed before the new year shutdown period. The Operations team finalised the scope of works for relining, with the contractor set to commence operations in Moranbah in early February. The targeted completion date is the end of June, and the project is well on track to achieve this milestone.





# CW233156 – Clermont Waste Management Facility Weighbridge Installation

This project encompasses the design and construction of a weighbridge, gatehouse, and access road, including the integration of a waste data recording system at the Clermont landfill facility. The pre-start meeting occurred on 10 January 2024, with ongoing progress in design work. The contractor has initiated material procurement, including the weighbridge, gatehouse, CCTV, boom gate, and traffic lights. Construction is expected to commence in early April 2024.

# CW223000 – Moranbah Landfill Phase 2 Stage 2

Construction started in August 2023, and the project is nearing practical completion by February 2024, following the successful installation of key components such as the Geosynthetic Clay Layer, Geomembrane Liner, and filter materials. The final claim is pending completion, and the project anticipates meeting budgetary requirements.

# CW222983 – Moranbah Water Treatment Plant Roof Replacement

In January 2024, the contractor progressed with off-site structural welding works for the roof structure components. Progress faced some hindrance as the contractor attended to emergency works for another council during recent cyclone events in the region. The delivery of structural material and components to the site is anticipated in February 2024, and the contractor is scheduled to arrive on-site in early February. Construction completion is expected in April 2024.

# CW233151 – St Lawrence Raw Water Storage and Raw Water Main

The construction of the new Raw Water Main, initiated in October 2023, has been successfully completed and commissioned in November 2023.

The water storage component tender, closed on 18 December 2023, and received only one tender response, with the quoted price exceeding the budget. The project manager and superintendent are actively exploring alternative designs with the tenderer to align with the remaining budget. An external consultant is providing construction superintendency services, and completion is anticipated in the next financial year, with an extension requested from the external grant agency.

# CW222971 – Clermont Water Network Augmentation

The project is currently in the finalization stage for construction drawings following the approval of 80% drawings. An extension of time has been requested, pending approval from the external funding agency. This design-only project is on track to complete by the end of March.

# CW233150 – Clermont Water Treatment Plant Filter Media Replacement and Plant Modernisation

This project consists of three sub-projects: Turbidity Analysers installation, Switchgear Upgrade Design and Construct, and Chemical Dosing Upgrade Design. The tender analysis for Turbidity Analysers is complete, with contract award expected in February 2024.

The Design and Construct Switchgear Upgrade and Chemical Dosing Upgrade contracts are currently under review by the Procurement team.

The external funding agency has been informed of the scope change and extension to the completion time to January 2025, and we are awaiting approval. This coordinated approach ensures the seamless progression of each project element, contributing to the successful implementation of the project.

PAGE 19



# CW243205 – Moranbah Rectification of Landfill Cell

A budget of \$4.2 million has been allocated for the project in the 2023/24 fiscal year. Oversight of the project is being handled by an external consultant, who presented a comprehensive briefing report and project timeline in December 2023. Following feedback from IRC officers, the consultant is currently in the process of engaging a geotechnical specialist to conduct a detailed examination of site conditions. The aim is to develop an improved option analysis, integrating alternative solutions for remediating the landfill site.

# CW243204 – Glenden Landfill to Transfer Station

This project involves the construction of a ramp, retaining walls, and handrails. A single submission was received for the Request for Quotes (RFQ) on 16 January 2024. After seeking clarification regarding the contractor's understanding of the scope of work and exploring alternative submissions, the contractor provided the necessary information and proposed an alternative price lower than the original submission. The contractor's submission is deemed reasonable and compliant. The award recommendation report is currently being prepared.

#### **Benefits**

Council can see a monthly progress report detailing the progress of projects in the Water and Waste 2023/24 Capital Program. This report communicates risks/failures/delays that have been identified within the Water and Waste 2023/24 Capital Works program.

# CONSULTATION

- Director Water and Waste
- Manager Operations and Maintenance
- Manager Waste Services
- · Planning and Project Department Project Managers

# **BASIS FOR RECOMMENDATION**

To improve services within the Water and Waste Directorate by providing more appropriate and relevant reporting, transparency, and a clear monitoring tool for Council. This report will help identify and communicate any project delays or possible project failures.

# ACTION ACCOUNTABILITY

The Managers and the Director of Water and Waste oversee the scoping, procurement, and completion of the projects identified within the 2023/24 Capital Projects Progress Summary spreadsheet. Furthermore, the appropriate Managers and the Director Water and Waste are held accountable for the delivery of the project stages which are completed within the identified timeframes.

#### **KEY MESSAGES**

That Council has open communication, oversight, and transparency of the Water and Waste 2023/24 Capital Works Program, to ensure Isaac will have effective and sustainable water and waste infrastructure that supports the needs of the region's communities and economic sectors.





# Report prepared by:

AMAL MEEGAHAWATTAGE Manager Planning and Projects

Date: 6 February 2024

Report authorised by: SCOTT CASEY Director Water and Waste

Date: 8 February 2024

### **ATTACHMENTS**

CONFIDENTIAL Attachment 1 – WW Capital Projects Progress Summary Spreadsheet – February 2024

### **REFERENCE DOCUMENT**

Nil

PAGES 22 - 23 HAVE INTENTIONALLY BEEN REMOVED DUE TO CONFIDENTIAL REASONS



MEETING DETAILS	Water and Waste Standing Committee	
	Wednesday 21 February 2024	
AUTHOR	Zoe Behrendt	
AUTHOR POSITION	Manager Business Services	

# 5.2

# WATER QUALITY INVESTIGATION ACTION PLAN UPDATE

# **EXECUTIVE SUMMARY**

The purpose of this report is to present to Council the Water Quality Reliability Investigation Action Plan Deliverables following the 2021/2022 Christmas Period water quality incidents.

# **OFFICER'S RECOMMENDATION**

#### That the Committee recommends that Council:

# 1. Receives and notes the Report for the Water Quality Investigation Action Plan Deliverables.

#### BACKGROUND

Over the Christmas/New Year period 2021/2022 there were water quality incidents in four (4) townships across the Isaac Region, which caused disruption and impacted the water supply service levels experienced by those communities. The Chief Executive Officer (CEO) of Isaac Regional Council (IRC) committed to a thorough investigation into the incidents. The terms of reference (TOR) for the investigation were approved by Council and an internal investigation was conducted which was peer reviewed by an independent third-party consultant.

Arising from the investigation an action plan was prepared and presented to Council. At the November 2022 Ordinary Meeting (refer resolution number 8126) Council received and acknowledged the Water Quality Investigation Report received and endorsed the Water Quality Investigation Report Action Plan and requested that a regular report be presented to Council on the progress against the action plan deliverables.

#### IMPLICATIONS

The risk of a reoccurrence of the water quality incidents remained after the events had been resolved, and it was clear from the subsequent investigation that there was no single solution which would entirely remove the risk of such water supply failures. The investigation report gave rise to an action plan which set out a suite of actions which will address the root causes of the water quality events.

The action plan contains both short term interventions and actions that form part of a longer-term strategy. Some of the short-term interventions such as the replacement of failed equipment will have an immediate impact on the likelihood of a reoccurrence but will not eliminate it entirely. Expected delivery dates have been identified in the action plan so that progress may be tracked and effectively managed. It should be noted that implementation of the recommended actions has taken a significant commitment from the Water and Waste management team and Isaac Regional Council.



In the period from November 2023 to January 2024 continued progress has been made on delivery of the water quality action plan. Progress to date is shown in detail in Attachment 1 - Water Quality Investigations Action Plan - Quarter 1 Update – January 2024 but can be summarised as follows:

Status	March 2023	June 2023	October 2023	January 2024
Action Complete	5	5	12*	16*
Action On - Track	28	28	23**	16**
Action Needs Improvement	2	3	1	2
Action Yet to Commence	1	0	0	0
Ongoing	1	1	1	3

<sup>\*\*</sup> Where actions have become embedded as business-as-usual activities they have been considered as complete.

<sup>\*\*\*</sup> Some of the identified actions are scheduled to be delivered over several years.

# CONSULTATION

- Director Water and Waste
- Manager Operations and Maintenance
- Program Leader Compliance and IMS
- Water and Waste Process Engineer

# **BASIS FOR RECOMMENDATION**

The Action Plan in Attachment A forms the basis of a future risk mitigation measures, and its implementation significantly reduces likelihood of similar water quality incidents occurring in the future. This report shows that progress has been made against most actions; 16 actions are complete, 16 are on track and all bar two actions are on track for successful delivery. In this period two actions items have been classified as "needs improvement" due to a collapse of the initial procurement process and a subsequent review of the best approach to deliver the project outcomes. This has led to an extension of the project timeframe and adjustment of the project status. This continuing implementation of this action plan will further reduce the risk of future water quality events occurring.

The scope and nature of many of the actions in the plan are multi-year initiatives which will embed a culture of continuous improvement in the Water and Waste directorate. These continuous improvement actions are incorporated into the Water and Waste Integrated Management System where appropriate to embed the changes. Funding relating to some of the actions has been included in the budget submissions for 2023/24 Financial Year.

The action plan is one mechanism being used to improve water quality in response to specific water quality events. It is complimented by broader activities such as the Water and Waste Integrated Management System (IMS) and review of the Drinking Water Quality Management Plan (DWQMP).



A recent review of the DWQMP includes a targeted improvement plan (Risk Management Improvement Plan - RMIP) which will inform the 2024/25 Financial Year investment strategy for the Water and Waste Directorate.

Although the continued delivery of the action plan in attachment 1 will result in a more robust and sustainable water service it represents the actions identified at a point in time and will be complemented by further initiatives which have commenced subsequently.

#### ACTION ACCOUNTABILITY

The Director of Water and Waste will continue to lead the improvement in reliability of the water supply schemes across the Region. PAGE

#### **KEY MESSAGES**

The management team of Water and Waste are committed to improving performance and implementing change to minimise the risk of water quality failures in the future, in a focused way in response to specific risks and also more systemically through continuous process improvement mechanisms.

Since the water quality events in December 2021/22 that triggered this investigation and action plan, the improvements made to date have enhanced the resilience of the water treatment prodess. More recent events have been identified and resolved before they have compromised water quality ar the continuity of water supply to the community. These practical examples demonstrate that the initiative s captured in this action plan along with increased asset maintenance and additional staff training have det to more sustainable services.

There are several inter-related initiatives encompassed by this action plan and also 🛱 complimentary business improvement frameworks. The ultimate success in preventing future water quality events will be dependent BEEN upon delivering them all, so that they complement each other.

Report prepared by:	Report authorised by:
ZOE BEHRENDT Manager Business Services	SCOTT CASEY
Date: 7 February 2024	Date: 7 February 2024
<ul> <li>ATTACHMENTS</li> <li>Attachment 1 - Water Quality Investigation</li> </ul>	
REFERENCE DOCUMENT     Nil	IDENTIAL F
	REASONS

# WATER QUALITY INVESTIGATIONS – ACTION PLAN

# Q3 UPDATE – JANUARY 2024

# <u>Key</u>

- Lead Is the resource identified to lead and co-ordinate the implementation of an action.
- Support Is a resource that will be required to contribute to the delivery of an action but will support the Lead.
- Input Is a resource that will be required to contribute to achieve the successful delivery of an action but will only contribute as required.
- BAU Business as Usual
- CAPEX Capital Expenditure
- DWQMP Drinking Water Quality Management Plan
- IMS Integrated Management System
- **OPEX Operational Expenditure**
- RMIP Risk Management Improvement Program
- SWIMS Statewide Information Management System
- WWILT Water and Waste Influencers and Leadership Team
- WTP Water Treatment Plant
- WWTP Wastewater Treatment Plant

Doc Number: [Insert document number] Date Effective: [Insert effective date] This document is uncontrolled when printed Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 27



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
1.	System Documentation / Knowledge Management	Review existing operational documentation to identify gaps.	4 months per site (across all 8 water treatment plants) Start Jan 2023 End Dec 2024	OPEX (Process Engineer) Operations checklist has been developed for use at all WTPs. Clermont WTP document search is nearing conclusion. In addition to the document search gaps in work instructions are identified through IMS audits. <b>ON TRACK</b>	There are significant gaps in engineering documentation across both WTP and WWTP. The majority of engineering documentation are saved in Capital Projects folders in I: drive rather than O&M folders. Strategic decisions are required to address existing gaps and prevent future gaps. Recommend a Technical Standard for documentation is produced, that is released with all capital project tenders. <b>ON TRACK</b>	A strategy using IMS procedures and capital projects to manage and resolve engineering documentation gaps and inaccuracies has been recommended. There is a cost to this approach so needs to be well defined and endorsed. <b>ON TRACK</b>	Ongoing with no significant change in the preceding period. <b>ON TRACK</b>
1A	System Documentation / Knowledge Management	Develop specific SOPs for lab testing procedures (specific	2 months per site (across all 8 water treatment plants	OPEX (Process Engineer)	Four work instructions have	Existing work instructions (WI) pending endorsement	Ongoing with no significant change in the



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		to the instrumentation that is at the sites).	following on from action 1A) Start Jan 2023 End April 2024	Fifteen work instructions have been identified across eight water treatment plants. Standardisation of benchtop test equipment is underway. <b>ON TRACK</b>	been submitted for safety consultation. Six work instructions are in- draft waiting for submission to safety consultation. Progress continues to be affected by access to I and U drive, which are currently unavailable. <b>ON TRACK</b>	and publishing on Iris. Second phase WIs identified and awaiting commencement. ON TRACK	preceding period. ON TRACK
1B	System Documentation / Knowledge Management	Document procedure for how to respond to changing raw water quality etc.	5 months (across all 8 water treatment plants following on from action 1B) May need to prioritise in high-risk sites. Start Jan 2023 End December 2026	OPEX (Process Engineer) A draft document has been produced for Clermont. ON TRACK	Progress continues to be affected by access to I and U drive, which are currently unavailable.	A procedure has been generated as part of the St Lawrence turbidity event. This procedure has been circulated. Development of the procedure has continued for raw water changes due to seasonal impacts. This	Ongoing with no significant change in the preceding period. <b>ON TRACK</b>

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 29



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						will be circulated to the Supervisor North and IMS Officer once complete.	
1C	Process Robustness (previously action 19)	Review processes, identify gaps or processes that would provide more robust response to variability in raw water quality (e.g. the use of a coated media processes rather than potassium permanganate). Consider what additional monitoring (including on-line) to provide early warning or automated process changes. For example, pH and DO monitoring to provide early warning that coated media manganese removal might be compromised. Also,	5 months (across all 8 water treatment plants following on from action 1B) May need to prioritise in high-risk sites. Start Jan 2023 End December 2026	OPEX (Process Engineer) Improvements have been identified through investigation of drinking water incidents. Process reviews have not commenced for other water treatment plants due to resource constraints. Separable portions will be included in the RFQ for the 'DWQMP 2023 Review' to conduct risk assessments to identify gaps and to	OPEX Project bid submitted for the review of the DWQMP and report preparation within the FY2324 budget. ON TRACK	DWQMP review has been conducted by external consultant which will inform and refresh the RMIP (Risk Management Improvement Program). These audits identify gaps and improvements prioritised on a risk basis including changes in raw water quality. Additional process audits conducted by	The DWQMP review and process audits have identified areas for improvement, and these have been input into the FY2425 budget preparation process for future investment. <b>ON TRACK</b>

Doc Number: [Insert document number] Date Effective: [Insert effective date] This document is uncontrolled when printed Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 30



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		raw water turbidity monitoring with automated step change to the coagulant dose rate. Consider using on-line manages analyser results with alarms and also feed forward change to the potassium permanganate dose rate. The changes to dose rates would be based on information gathered from previous events and jar testing.		include site-based assessments. See attachment B for details. ON TRACK		<ul> <li>the process engineer for all sites which will feed into the investment decision process.</li> <li>Project scoping underway for process improvement opportunities for Carmila WTP.</li> <li>Some of the RMIP actions are to investigate options for improvement and this work will be assessed in the investment decision making process.</li> </ul>	
						ON TRACK	



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
2.	System Documentation / Knowledge Management	Ensure one updated operation and maintenance manual exists for each plant with the manuals all being consistent in format to enable operators from other plants to easily find information.	3 year project (average 4 months per site) Start 1 July 2023 End June 2026	OPEX Project requiring Process Engineer skillset) Collation of information town by town plant by plant from ECM is underway to assist with this project. Budget submission 23-24, 24-25 & 25- 26 to have these manuals written. See Lucidity action 6978 for comment.	Funding for this action has been submitted as a PAG bid for the FY2324 financial year. <b>ON TRACK</b>	Data acquisition for water treatment sites has commenced to update the Operations and Maintenance Manuals. <b>ON TRACK</b>	Lucidity action 6978. Contractor has been engaged to complete the manuals. MMT and DYS water treatment plants and wastewater treatment plants will be completed this year.
				ON TRACK			ON TRACK
3.	System Documentation / Knowledge Management	Ensure manuals are electronic enabling search mechanisms to quickly find relevant information.	No timeframe – as documents are created	Business as Usual This is an ongoing task which is managed through the IMS. IMS system reviews are conducted quarterly. See Lucidity action 6978 for comment.	IMS recertification was undertaken in May 23. Documents will be integrated into the IMS system as they are completed. ON TRACK	IMS surveillance audit completed in June 2023. Separate report to Council submitted to November Council meeting. ON TRACK	Capture of new documentation in IMS is routine part of the document and process control. Now considered BAU.

Doc Number: [Insert document number] Date Effective: [Insert effective date] This document is uncontrolled when printed Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 32



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
				ON TRACK			COMPLETE - ACTION CLOSED
4.	SCADA	The reviewers understand that a SCADA strategy is currently being prepared. It is important that this strategy addresses the lack of a centralised system, ensures all sites have similar screen layouts to facilitate operators moving from one plant to another.	Start Jan 2023 End June 24	Endorsed by Council Resolution COMPLETE - ACTION CLOSED	SCADA projects for Glenden and Nebo have been out to tender and together without the general refresh of the SCADA platform are ready for award subject to approved by the W&W Standing Committee.	COMPLETE - ACTION CLOSED	The award of the SCADA project failed to conclude due to issue with the preferred contractor. Project has been reviewed, the scope adjusted and has been re- issued to the market.
5.	SCADA	Consider having a "Head Office" SCADA that receives alarms for all important operation sites (raw water sources pump stations, key water treatment processes and monitoring results etc). These alarms should be monitored/automatical	Start Jan 2023 End June 24 Deadline extended in line with SCADA Strategy. End Dec 2025	Consideration has been given to this action and it is being considered as a pathway to improve the overall Service Delivery Model. There are long term budgetary and operational factors and impacts to be	This item will be encompassed as one element of the Service Delivery Model Review.	The development of the new service delivery model is likely to take longer to implement than June 2024. However the SCADA development	No significant development on the subject of a regional SCADA control centre in the last quarter. <b>ONGOING</b>

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 33



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		ly escalated to key personnel via SMS and/or voice dialling system (eg SCADA phone) to message or call people. If no answer, call goes to the next person until acknowledged.		taken into account. New Scada upgrades will have oversight on the alarm and escalation of alarms. Discussion and collaborations at a regional level continue as part of the WIM Alliance. See Lucidity action 6981 for comment. <b>ON TRACK</b>		projects will continue despite this. Discussions are underway through the WIM Alliance on the feasibility of regional control room options. <b>ON TRACK</b>	
6.	SCADA	Ensure the SCADA system can be remotely accessed by authorised personnel. Those authorised personnel should only be authorised to change set points or operate remotely within their area of expertise.	Completed for sites that have SCADA installed. Start Jan 2023 End March 23	Complete COMPLETE - ACTION CLOSED	As more sites are SCADA enabled the visibility and access will be expanded. COMPLETE	COMPLETE - ACTION CLOSED	COMPLETE - ACTION CLOSED
		Review who our authorised personnel will be	12 months (guideline?) Annual review to be undertaken each year	Business as Usual This is an ongoing task. Reviews will be done annually or	ON TRACK	This is embedded in BAU processes.	COMPLETE – ACTION CLOSED

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE 34



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
				when staff changes occur.		COMPLETE - ACTION CLOSED	
				See Lucidity action 6983 for comment. <b>ON TRACK</b>			
		For sites that do not have SCADA – how do we get those sites accessible	2.5 years Start Jan 2023 End July 25	CAPEX - (Project already identified in capital program) Identify and prioritise the treatment plant sites and SPS to have upgrades of SCADA so that remote visibility and alarming can be achieved. Ongoing project – 2 sites underway FY2223. Additional site roll out planned for subsequent FY. See Lucidity action 6984 for comment. ON TRACK	SCADA projects for Glenden and Nebo have been out to tender and together without the general refresh of the SCADA platform are ready for award subject to approved by the W&W Standing Committee.	SCADA project was offered to preferred supplier but not accepted. Price escalation prompted a redefinition of the project scope and a return to the market for re- tender. <b>ON TRACK</b>	The first element of the revised SCADA project has been to the market and is in the evaluation stage. Award to technical advisor expected February 2024.

Document Owner: [Insert document owner] Version [#] – ECM [#] P**PACC 닫 35** 



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
7.	SCADA	Ensure the SCADA system has the capability to put logic to alert discrepancies when variance between actual and recorded information is detected. (eg if X filters on-line then expected flow is Y ML, have a discrepancy alarm)	3.5 years Start July 2022 End Dec 25	CAPEX - (Project already identified in capital program) Functionality included in the scope of works for SCADA upgrades in line with the SCADA strategy endorsed by Council. See Lucidity action 6985 for comment. ON TRACK	Capital projects continue to be delivered in line with the SCADA Strategy ON TRACK	Delays experienced in tender process for SCADA projects due to disruption to the preferred supplier however the project has been re-scoped and will return to market.	The first element of the revised SCADA project has been to the market and is in the evaluation stage. Award to technical advisor expected February 2024.
8.	SCADA	As part of the strategy development review systems and processes to identify gaps in monitoring and control. Ensure there is sufficient on- line instrumentation for monitoring key water quality parameters including Critical Control Points (CCPs). Related to this, there is a need to ensure there is sufficient control of	3.5 years Start July 2022 End Dec 25	OPEX will lead into a CAPEX project. Monitoring and control gaps will be identified as part of the process reviews. Equipment lists for online analysers at water treatment plants have been produced. Within the RFQ for 'DWQMP 2023 Review', there will	PAG submission for upgrades to Carmilla WTP has been submitted for FY2324. <b>ON TRACK</b>	DWQMP review has been completed, report is being written. Process audits have been undertaken; results are being collated. CCP's have been reviewed.	Risk assessments completed for 8x WTPs. 2023 Risk management improvement program (RMIP) produced as an output of the DWQMP review.

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE36



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
	the plant, such as plant shutdowns on breaches of CCP limits.		be a separable portion to assess the current online analysers.	From these activities monitoring and control	ON TRACK		
				Additional functionality included in the scope of works for SCADA upgrades in line with the SCADA strategy endorsed by Council.		requirement will be identified. ON TRACK	
				See attachment B for details. See Lucidity action 6986 for comment.			
				ON TRACK			
9.	SCADA       The strategy should consider installing instrumentation to monitor raw and treated water quality, production and delivery with trends being monitored to alert operators in advance of the need to start adjusting their plant operation.	consider installing instrumentation to monitor raw and	3.5 years Start July 2022	CAPEX - (Project already identified in capital program) CAPEX SCADA	Capital projects continue to be delivered in line with the SCADA	DWQMP review and process audits have assessed	Risk assessments completed for 8x WTPs.
		production and delivery with trends being monitored to	End Dec 25	Project identified to complete this action.	Strategy ON TRACK	additional online	2023 Risk management improvement
		advance of the need to start adjusting their			quality. ON TRACK	program (RMIP) produced as	

Document Owner: [Insert document owner] Version [#] – ECM [#] PPA(CE237



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
				ON TRACK			an output of the DWQMP review. <b>ON TRACK</b>
10.	Escalation Processes are not Working to Raise all the Critical Issues	Ensure staff receive CCP response refresher training (Apply the risk management principles of the water industry standards, guidelines and legislation) as a refresher which covers the 12 elements of the Australian Drinking Water Guidelines as well as critical control points, critical limits and response plans.	Ongoing program Start Oct 2022 End Ongoing	Business as Usual This is an ongoing task. CCP review completed. CCP signage printed for each site and training carried out at Dec 2022 Treatment Plant Operators Meeting. Future reviews and process improvement will result in CCP revisions as needed. See Lucidity action 6988 for comment. <b>ON TRACK</b>	Operator training completed on CCP and the need to escalate issues to supervisory staff. ON TRACK	The review of the DWQMP has reduced the number of CCPs (critical control points), (no longer includes treated water turbidity or treated water pH). The CCP online analysers are within the capital plan. Department of Resource Development Manufacturing and Water (DRDMW) presented to operators team meeting on events and	2023 Review of DWQMP complete and submitted to RDMW – awaiting approval. CCPs now on traffic light charts with actions and reporting. Operator awareness training of CCPs once DWQMP has been approved. <b>ON TRACK</b>

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE38



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						incident reporting. The importance of escalation reinforced along	
						with advice to contact - RDMW in an event for timely reporting.	
		Consider undertaking the Water Industry Training Package Unit of Competency NWPGEN017	Stephen to confirm the training package is equivalent to Cert 3 – review the qualification. Start March 2023	Investigating if this module has been completed by operators with cert 3 and if trainees have this module in training plan. Kielly Glanville assisting this info.	ON GOING	ON GOING	ON GOING
			End Dec 2023	See Lucidity action 6989 for comment. <b>ON GOING</b>			
11.	Escalation Processes are not Working to Raise all the Critical Issues	Display the CCP limits and response plans in each plant in poster form so levels are clearly understood by	Reviewed yearly. New CPP will be installed at plants by end January 2023	Business as Usual This is an ongoing task.	Initial CCP review and visibility complete.	COMPLETE - ACTION CLOSED	COMPLETE - ACTION CLOSED



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		any operator working in the plant. Council should review these CCP responses and limits to ensure they are in line with ADWG guidelines	Start Oct 2022 End Jan 23	All were provided at the January Ops Meeting to be displayed on the walls of each plant. This has been reinforced through additional meetings and via email. All staff are fully aware of their limits. See Lucidity action 6990 for comment. <b>ON TRACK</b>	<b>COMPLETE</b> Further updates to CCP will be completed as part of annual reviews.		
	Ineffective Alarms to Identify Problems and then Escalation (H20 action item 15)	Implement Critical Operating Point (COP) limits in the water supply network, covering low and high limits for free chlorine.	3.5 years – phased implementation based on risk Start July 2022 End Dec 25	OPEX Project & CAPEX (Project already identified in capital program) Review has been carried out and released to operations team. See Lucidity action 6991 for comment. <b>ON TRACK</b>	Capital project for MMT Cleanwater Reservoir included in PAG submissions for FY2324. <b>ON TRACK</b>	MMT Cleanwater Reservoir project sent to market and prices returned were many times over budget. Operational control measures remain in place whilst	Evaluation of drinking water quality at MMT as part of the DWQMP review highlighted elevated risk around Chlorine contact time. This is being managed operationally but has prompted the



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						alternatives options are considered for the project. NEEDS IMPROVEMENT	re-submission of the capital project for the MMT reservoir main for FY2425 budget consideration.
12.	Escalation Processes are not Working to Raise all the Critical Issues	Review emergency response/escalation procedures. Review existing procedures and identify gaps (eg Business Continuity Plans, Raw Water Quality Changes due to rain/drought/fires/etc).	4 months across all 8 water treatment plants to complete the review (aligns with 1A) 5 months across all 8 water treatment plants to write the documents (aligns with 1C) Start Jan 2023 End Dec 25	OPEX (Process Engineer) The DWQMP 2021 is currently conditional on updating the incident management system. This is in the process of being drafted by IRC. A peer review will be included as a separable portion in the RFQ for the DWQMP 2023 Review. A work instruction has been drafted that outlines responsibility and response during	OPEX Project bid submitted for the review of the DWQMP and report preparation within the FY2324 budget. Progress continues to be affected by access to I and U drive, which are currently unavailable. <b>ON TRACK</b>	Raw water quality changes due to rain/drought/fire s is covered in action 1B. DWQMP review has been completed, and the final report is being prepared by external consultant. <b>ON TRACK</b>	Incident and emergency management section updated in the DWQMP and is currently awaiting review by RDMW. COMPLETE – ACTION CLOSED

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE241



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
				drinking water quality incidents.			
				A flow chart has been produced to guide operators in requirements related to critical control points; response to a breach in target limits or critical limits. See attachment B for details. See Lucidity action 6992 for comment.			
				ON TRACK			
		Conduct mock incident response to these incidents, including significant incidents that require escalation and potentially need the formation of an incident response team such as boil water alert or involvement of emergency services,	Already have a mock trial schedule Start July 2022 End On going	Business as Usual Mock trials were carried out at Monthly Operator meetings in November and December 2022 to prepare for incidents relating to water quality.	An actual boil water notice was implemented in Moranbah and involved standing up the Emergency Management Committee. Additional mock trials will be conducted during	IMS surveillance audits are scheduled at multiple sites each year. ON TRACK	Preparatory meetings were held in the lead up to the Christmas period to prepare staff for possible incidents building on previous mock trials and

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE242



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		etc as a means of training staff.		See attachment B for details.	the year to prepare for future events.		incident debriefs.
				See Lucidity action 6993 for comment. <b>ON TRACK</b>	ON TRACK		IMS surveillance audits are schedule for May 2024 at 6 sites including Glenden and Moranbah water treatment plants. These activities are now considered part of BAU.
							COMPLETE – ACTION CLOSED
13	Ineffective Alarms to Identify Problems and then Escalation	Ideally results from on-line instruments, on-site tests and external NATA lab need to be consolidated into one	3.5 years - SWIMS Project NOTE - SWIMS will become the daily data log.	BAU & OPEX Project Supported by CAPEX SCADA program.	Service Delivery Model Review will consider the best resource to complete the SWIMS data	Discussions with Mackay Laboratory and QWD continue regarding the automatic	Operational monitoring updated within the 2023 DWQMP.

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE243



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		database with results alarmed if discrepancies are identified. The results should be regularly and promptly reviewed and acted on where necessary.	NOTE – links to SCADA implementation. Start July 2022 End Dec 25	QLD Water SWIMS report program will allow for this action to be completed. One treatment plant has been moved to this platform as a trial with others transferred on a progressive program. QLD Water Directorate is in negotiations with Mackay Lab to have their Lab results able to be uploaded directly into SWIMS report. See Lucidity action 6994 for comment.	capture and submission. Discussions with Mackay Laboratory and QWD continue regarding the automatic upload of lab results. <b>ON TRACK</b>	upload of lab results. Consideration of the best resource to complete the SWIMS data capture and submission is ongoing as part of organisational changes. <b>ON TRACK</b>	Log sheets to be updated to align with 2023 DWQMP. ON TRACK
14.	Ineffective Alarms to Identify Problems and then Escalation	Trends should also be automatically calculated to alert before critical levels are reached.	3.5 years - SWIMS Project	OPEX Project & CAPEX Capex Scada Project already	SCADA projects for Glenden and Nebo have been out to tender and together without the general refresh	Delays experienced in tender process for SCADA projects due to disruption to the	The award of the SCADA project failed to conclude due to issue with the preferred



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
			NOTE - SWIMS will become the daily data log NOTE – links to SCADA implementation. Start July 2022 End Dec 25	identified to address this action. See Lucidity action 6995 for comment. ON TRACK	of the SCADA platform are ready for award subject to approved by the W&W Standing Committee. ON TRACK	preferred supplier. ON TRACK	contractor. Project has been reviewed, the scope adjusted and has been re- issued to the market. The first element of he revised SCADA project has been to the market and is in the evaluation stage. Award to technical advisor expected February 2024.
15.	Ineffective Alarms to Identify Problems and then Escalation	Consider the inclusion of regular reservoir inspections to check integrity. (e.g. roof intact and prevents rainwater entering, suitable bird proofing,	12 months Start Jan 2023 End Dec 23	Business as Usual This is an ongoing task. Reservoir cleaning and inspection program has been included in the	Preventative Maintenance Program is being rolled out with initial tenders being released.	Additional Preventative Maintenance contracts have been let in line with the FY23/24 program.	Reservoir cleaning program is now released as a preventative maintenance program and is

Document Owner: [Insert document owner] Version [#] – ECM [#] PPAOE245



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		no vandalism breaches, etc) ACTION - Development of the program – inspection/cleaning		preventive maintenance program. This tender has not been released yet. See Lucidity action 6996 for comment. ON TRACK	OPEX project included in FY2324 budget submission. Speed of roll out is dependent upon levels of funding. ON TRACK	ON TRACK	considered part of BAU. COMPLETE – ACTION CLOSED
16.	Loss of Long- Term Historical Knowledge – Staff Turnover	Review existing operator worksheets to ensure all relevant tasks are included. Also review the frequencies of those tasks to ensure that changes are identified (e.g. algal levels) to ensure responses to changes are actioned before they become a problem.	Copy details from 1A & 1C Start Jan 2023 End BAU	OPEX (Process Engineer) Review of daily, weekly and monthly task has begun. Supervisors are leading this action. See Lucidity action 6997 for comment. <b>ON TRACK</b>	Daily log sheets have been improved for CLM WTP and STL WTP. Water quality testing at MMT WTP has increased due to the transition to potassium permanganate. The current focus is on improvements in testing and monitoring at MMT WWTP due to 4 consecutive months of breaches.	Aeration of raw water dams is contained in Capital Plan. Operational monitoring revised within the DWQMP Review. WTP checklists being improved by Integrated Management System (IMS). Transition to the Statewide Water Information Management System	Log sheets to be updated to align with 2023 DWQMP. Transition to SWIMS is ongoing. <b>ON TRACK</b>



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
					ON TRACK	(SWIMS) in 6 to 8 weeks (so no requirement for updating log sheets) BGA Management Plan scheduled to be updated in 2024-25. <b>ON TRACK</b>	
		Ensure there is sufficient information available for staff who are not fully conversant with the plant to be able to effectively complete the tasks on the worksheets.	Ongoing action Start Jan 2023 End BAU	Some work in this space has started to update tasks. Training of operators when they arrive on site with continued follow up training. See Lucidity action 6998 for comment. <b>ON TRACK</b>	Additional work needs to be undertaken in conjunction with P&C Training on on-boarding and on-site training.	Training of staff in the capture and recording of water data is ongoing. Discussions about improving onboarding of new staff continues with P&C.	All activities commenced in the previous quarter are ongoing an yet to reach a conclusion. <b>ON TRACK</b>
						Recruitment and retention	



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						activities continue along with discussions with P&C on how this might be improved.	
						ON TRACK	
		Competency review/audit – to ensure the employee understands the process	Ongoing action Start Jan 2023 End BAU	Business as Usual This work is captured as part of the regular IMS audits. See Lucidity action 6999 for comment. <b>ON TRACK</b>	Regular IMS audits are being delivered and validated with a quarterly management reviews and annual external audits. ON TRACK	Operator training continues in operator team meetings along with quarterly IMS audits checking competency. Recent annual IMS surveillance audit and DWQMP audits have also interviewed operational staff to check there understanding of operational processes.	This activity will continue as BAU. Regular training as part of operational meeting, site support for operators and routine IMS audits all support operators understanding of the treatment processes. COMPLETE – ACTION CLOSED



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
17.	Loss of Long- Term Historical Knowledge – Staff Turnover	Ensure one updated operation and maintenance manual exists for each plant with the manuals all being consistent in format to enable operators from other plants to easily find information.	3 year project (average 4 months per site) Start Jan 2023 End June 24	OPEX Project requiring Process Engineer skillset. This is an ongoing action that is being considered as inclusion as an operational project. See Lucidity action 7000 for comment. YET TO COMMENCE	Funding for an OPEX Project been submitted for the FY2324 financial year. <b>ON TRACK</b>	Recruitment of Process Engineer will be presented to Council in Q4. <b>ON TRACK</b>	The presentation of the Process Engineer to Council was suspended prior to Christmas but will be reinitiated. An operational project to prepare operation and maintenance manuals is underway.
18.	Loss of Long- Term Historical Knowledge – Staff Turnover	Ensure manuals are electronic enabling search mechanisms to quickly find relevant information.	No23 timeframe – as documents are created Start Jan 2023 End BAU	Business as Usual This is an ongoing task which is managed through the IMS and general business processes to ensure that documents are stored and easily accessed.	Documents will be integrated into the IMS system as they are completed. ON TRACK	Operating procedures continue to be integrated into the IMS. Discussions with Governance team are seeking to streamline the	COMPLETE – ACTION CLOSED

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE249



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
				Missing documents identified from earlier actions will also be captured and made visible as they are prepared.		document control process.	
				See Lucidity action 7001 for comment.			
				ON TRACK			
19.	Process Robustness (renumbered to action 1d)	Review processes, identify gaps or processes that would provide more robust response to variability in raw water quality (eg the use of a coated media processes rather than potassium permanganate). Consider what additional monitoring (including on-line) to provide early warning or automated process changes. For example, pH and DO monitoring to provide early warning that coated media		Renumbered as Action 1C. COMPLETE	COMPLETE	COMPLETE	COMPLETE - ACTION CLOSED



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
		manganese removal might be compromised. Also, raw water turbidity monitoring with automated step change to the coagulant dose rate. Consider using on-line manages analyser results with alarms and also feed forward change to the potassium permanganate dose rate. The changes to dose rates would be based on information gathered from previous events and jar testing.					
20.	Review Plant Bench Monitoring Equipment	Need better bench- scale lab equipment for operators to overcome the issue of operators using Palin test kits with the incorrect range.	Completed Start Jan 2023 End Jully 24	Delivered under CAPEX See Lucidity action 7002 for comment.	Lab equipment purchases have commenced and additional funding has been included into the FY2324 budget.	COMPLETE	COMPLETE – ACTION CLOSED



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
21.	Asset Management	An asset management system needs to be implemented to identify asset condition and replacement schedules.	2 years Start July 2023? End Jully 25?	CAPEX for asset replacement OPEX – W&W Asset Management resource – currently no resource. Draft asset management plan complete. Asset revaluation scheduled for FY2324. Revaluation will include asset condition. Needs resource to implement. See Lucidity action 7009 for comment.	Revaluation scope does not include asset condition assessment. No resource currently available to develop asset management plans and integrate with preventative maintenance program. This constraint will be considered as part of the Service Delivery Model Review. <b>NEEDS</b> <b>IMPROVEMENT</b>	Asset revaluation is complete. Asset management plan currently being updated. Resources reallocated to work on asset management and long-term capital investment programs. IRC Assets team invited to work with W&W in development of investment programs. <b>ON TRACK</b>	The draft asset management plan has been reviewed. Work on the water and waste investment strategy has commenced. Preparation of the 10 year capital programs has been done. All sources of recommended investment have been collated into a comprehensive list of identified need. <b>ON TRACK</b>



Asset Management       Amend the draft AMPs with focus on the improvement plan       12 months from engagement of resource       OPEX – W&W Asset Management resource.       Will be considered as part of the source Delivery Model Review.       Asset management plan currently being updated.       The review of the asset management plan is complete and is just awaiting approval.         Start June 23       Start June 24       Needs resource to implement.       NEEDS implement.       Resource existing resources       Resource asset management reviewed and existing resources.       Resource allocation reviewed and existing resources.       Dedicated asset         NEEDS implement.       NEEDS implement.       Resource implement.       Resource asset       Dedicated asset       Dedicated asset         NEEDS implement.       NEEDS implement.       NEEDS implement.       NEEDS implement.       Resource implement.       Resource asset       Dedicated asset         NEEDS implement do vork on asset investment programs.       NEEDS implemented       NEEDS implement do vork on asset investment programs.       ON TRACK       Ne meantime existing resources are focusing on the continued development of the asset register and 10 year investment programs.	NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
I ON TRACK			AMPs with focus on	engagement of resource Start June 23 End	Management resource – currently no resource. Needs resource to implement. First step to develop implementation plan. See Lucidity action 7010 for comment. NEEDS	as part of the Service Delivery Model Review.	management plan currently being updated. Resource allocation reviewed and existing resources reallocated to work on asset management and long-term capital investment programs.	the asset management plan is complete and is just awaiting approval. Dedicated asset management resources have been identified and are will be implemented over the coming periods if approved. In the meantime existing resources are focusing on the continued development of the asset register and 10 year investment



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
	Asset Management	To ensure preventative maintenance is carried out on a scheduled basis. Develop a system to enable breakdowns to be recorded and actioned appropriately to ensure critical equipment and instrumentation is working correctly with minimal downtime.	Initial development of program – 12 months Ongoing program Start Jan 23 End BAU	BAU/OPEX Process implemented for reporting of failed equipment, data base developed to capture failed equipment reports and failed equipment reports are sent to relevant person to action with finalisation report entered to data base to close out action. 28 preventative maintenance items have been identified and prioritised. 10 underway with 5 near completion for contract s to be issued. See Lucidity action 7003 for comment. ON TRACK	Preventative maintenance program is being delivered. Additional funding has been requested in the FY2324 budget. Asset failure and repair data capture and work request management will likely be included as a module in the Tech1 rollout. Initial program development complete. <b>ON TRACK</b>	Funding of \$750k budget for FY23/24. Tech 1 roll out for maintenance management not scheduled for a couple of years. Preventative maintenance program continue to be rolled out in line with the delivery schedule. <b>ON TRACK</b>	This activity will continue as BAU. Additional preventative maintenance funding will be requested in the FY2425 budget to consolidate and complete the roll out of the preventative maintenance program. Tech 1 Maintenance Management Module is part of the Digital Transformation Strategy. <b>COMPLETE –</b> <b>ACTION</b> <b>CLOSED</b>



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
22.	Workplace Culture	Continue the workplace cultural reforms that have currently been initiated.	Ongoing Start July 22 End BAU	<ul> <li>Business as Usual</li> <li>This is a continuous long-term initiative to improve the working environment and team effectiveness.</li> <li>It involves engagement of the OLT in culture regeneration and business improvement initiatives.</li> <li>Culture leadership is also translated into operational team meetings.</li> <li>See Lucidity action 7004 for comment.</li> <li>ON TRACK</li> </ul>	Continuation of BAU activities and development of a Directorate staff survey. IRC Cultural Guidelines circulated to staff and discuss with OLT members. ON TRACK	Reward and recognition initiative has been implemented and reinforces IRC values and outstanding performance within the Directorate. Cultural development is discussed monthly at the WWILT meetings and future initiatives are proposed. Team development activities are delivered through WWILT in collaboration with P&C. Cultural development and	This activity will continue as BAU. COMPLETE – ACTION CLOSED

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE255



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						improvement is embedded in BAU across the Directorate.	
						COMPLETE	
23.	Workplace Culture	Emphasise the approach/philosophy of continuous improvement.	Ongoing Start July 22 End BAU	<ul> <li>Business as Usual</li> <li>This is an ongoing initiative and prosecuted through Leadership team and WWILT meetings as well as regular team meetings specifically targeting the continuous improvement register.</li> <li>See Lucidity action 7005 for comment.</li> <li>ON TRACK</li> </ul>	The WWILT group continues to meet and thrive and has identified multiple projects to provide business improvements to the W&W directorate. These activities are complimented by the structured approach of the IMS and external audits and certification. <b>ON TRACK</b>	The WWILT group continues to meet and thrive and has identified multiple projects to provide business improvements to the W&W directorate. These activities are complimented by the structured approach of the IMS and external audits and certification. This is complimented by ongoing	This activity will continue as BAU. COMPLETE – ACTION CLOSED

Document Owner: [Insert document owner] Version [#] – ECM [#] PPACE256



NO.	FACTORS	ACTION	TIMELINE	PROGRESS MARCH 2023	PROGRESS JUNE 2023	PROGRESS OCTOBER 2023	PROGRESS JANUARY 2024
						training and information session at Operational team meetings. These activities are now embedded in BAU.	
						COMPLETE	
24.	Drinking Water Quality Management Plan	Review and audit of existing DWQMP	November 2022 Start July 22 End BAU	OPEX Project DWQMP audit completed October 2022. Final report complete November 2022. See Lucidity ID 384. <b>COMPLETE</b>	Budget included for DWQMP review in FY2324. COMPLETE and ONGOING	DWQMP audit is complete and final report is being prepared. COMPLETE	This activity will continue as BAU. The DWQMP will be reviewed on a 3 year cycle. COMPLETE – ACTION CLOSED
	Drinking Water Quality	Risk assessment of water supply schemes	6 years (one identified plant per year)	OPEX Project	This will be a long- term cycling process where we	Risk assessment of plant through	This activity will continue as BAU.



NO.	FACTORS	ACTION	TIMELINE	PROGRESS	PROGRESS	PROGRESS	PROGRESS
				<b>MARCH 2023</b>	<b>JUNE 2023</b>	OCTOBER	JANUARY
						2023	2024
	Management			DWQMP audit	review process at	the DWQMP	
	Plan		Start	completed October 2022.	one plant each	review have	The DWQMP
			July 22		year and integrate this with reviews of	been completed for FY23/24.	will be
				Final report	the DWQMP and		reviewed on a 3 year cycle.
			End	complete November 2022.	the continuation of	COMPLETE	
			June 28		the IMS.		COMPLETE -
				IMS processes will			ACTION
				also reinforce the	ON TRACK		CLOSED
				management of risk in the water			
				treatment			
				processes.			
				See Lucidity ID 384.			
				ON TRACK			





MEETING DETAILS	Water and Waste Standing Committee Wednesday 21 February 2024
AUTHOR	Scott Casey
AUTHOR POSITION	Director Water and Waste

#### 6.1

### WATER AND WASTE INFORMATION BULLETIN – FEBRUARY2024

#### EXECUTIVE SUMMARY

The Water and Waste Directorate Information Bulletin for February 2024 is provided for Committee review.

#### **OFFICER'S RECOMMENDATION**

#### That the Committee:

#### 1. Notes the Water and Waste Directorate Information Bulletin for February 2024.

#### BACKGROUND

The attached Information Bulletin for February 2024 provides an operational update for Committee review on the Water and Waste Directorate.

#### IMPLICATIONS

Any specific implications or risks will be outlined in the Information Bulletin

#### CONSULTATION

Water and Waste Directorate Managers and Staff.

#### **BASIS FOR RECOMMENDATION**

This is an information only report.

#### ACTION ACCOUNTABILITY

Information only report.

#### **KEY MESSAGES**

Operational update to the Elected Members.

#### Report prepared by:

SCOTT CASEY Director Water and Waste

Date: 7 February 2024

Report authorised by:

KEN GOULDTHORP Chief Executive Officer

Date: 12 February 2024



### ATTACHMENTS

• Attachment 1 – Water and Waste Directorate Information Bulletin – February 2024

#### **REFERENCE DOCUMENT**

• Nil



#### DATE: FEBRUARY 2024

#### 6.1 WATER AND WASTE

#### DIRECTORATE HIGHLIGHTS

#### Water Meter Reading

Biannual water meter reading commenced in January. The meter reading was outsourced to an external provider, Dataright. Water notices will be issued in February and are due in March.

#### Department of Environment, Science and Innovations (DESI)

A meeting was held with the Department of Environment, Science and Innovations (DESI) to discuss Effluent Reuse Strategy and review progress. The meeting was collaborative in nature and strengthens the working relationship with DESI.

#### **EMERGING RISKS:**

#### Information Technical

Reliability of outlook through Citrix, operational computers on Treatment Plants and the lack of printing/scanning capabilities on Treatment Plants continues to inhibit the day-to-day work processes of the operational teams.

#### **Resourcing Levels**

There have been some good candidates interviewed but only limited success in securing direct employment and instances of preferred candidates not accepting positions or withdrawing after receiving a letter of award. Long term vacancies are still impacting on the capability of the team.



### **BUSINESS SERVICES**

#### **PREVIOUS MONTH'S PROGRAM:**

#### Staff recruitment

All current vacancies in the Business Services team have been filled as of January 2024.

#### **Customer Administration Team**

Achievements and areas of focus for January:

- Preparation of data for the distribution of water notices for the July-December billing period.
- Review and debrief of events that occurred over Christmas / New Year period.
- Continued onboarding of new team members

#### Compliance and Integrated Management System (IMS) Team

Achievements and areas of focus for January:

- Met with the Department of Environment, Science and Innovation (DESI) regarding effluent reuse across the region.
- Conduct a debrief of water supply events that occurred over the Christmas and New Year period.
- Complete internal IMS Audits at Moranbah Waste Management Facility, Moranbah Wastewater Treatment Plant and Moranbah Water Treatment Plant to prepare sites for external audits in May 2024.
- Work with Operations and Planning Engineer on Environmental Authority Amendment for the Nebo Wastewater Treatment Plant inflow condition.

#### WATER AND WASTE COMPLIANCE - JANUARY 2024

All external compliance reporting is up to date.

#### Non-compliance with the Department of Environment, Science and Innovation (DESI)

Date of breach	Community	Medium	Location	Parameter	Written notification to Regulator
2/01/2024	Moranbah	Wastewater	WWTP	Inflows	Yes
3/01/2024					
3/01/2024	Clermont	Treated Effluent	WWTP	Free Chlorine	Yes
3/01/2024	Moranbah	Treated Effluent	WWTP	Total Phosphorus	Yes
3/01/2024	Moranbah	Treated Effluent	WWTP	Free Chlorine	
	Middlemount				
	Dysart				
	Glenden				
	Nebo				Yes
29/01/2024	Glenden	Treated Effluent	WWTP	E.Coli	Yes
30/01/2024	Nebo	Wastewater	WWTP	Inflow	
31/01/2024					Yes

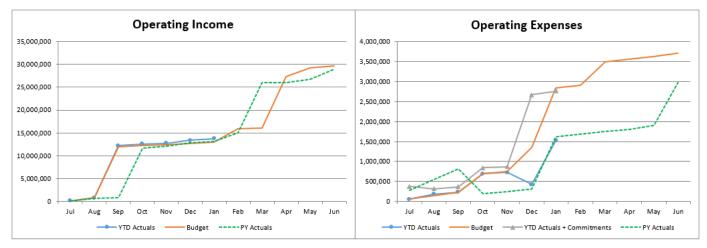




# Non-compliance with the Department of Regional Development, Manufacturing, and Water (DRDMW)

Date of breach	Community	Medium	Location	Parameter	Written notification to Regulator
Nil					

#### FINANCIAL REPORT:



#### **DEVIATION FROM BUDGET AND POLICY:**

Income and Expenditure is within budget for the period. Expected variations will be included in budget revisions for Quarter 2, 2023/24.

#### NEXT MONTH'S PROGRAM:

#### **Customer Administration Team**

Areas of focus for February

- Finalising Water notices
- Upskilling and knowledge building the Business Services Customer Administration Team
- Partaking and completing the IMS Business Services Customer Administration Team Audit

#### Compliance and Integrated Management System (IMS)

Areas of focus for February

- Work with site staff at Moranbah and Glenden Waste Facilities, Water and Wastewater Treatment Plants to rectify issues identified during internal audit.
- Conduct internal audit with Business Services Customer Administration Team
- Finalise submission of Environmental Authority Amendment for Grosvenor Creek Release to Department of Environment, Science and Innovation (DESI)

PAGE 63

#### Water Restrictions

Water restrictions were lifted in Carmilla and St Lawrence in December due to rainfall in the region.



CURRENT AND PROJECTED	LEVE	L 1 (L1)	LEVE	L 2 (L2)	LEVEL	_ 3 (L3)
Location	Start Date	End Date	Start Date	End Date	Start Date	End Date
Middlemount (L1)	16/03/2019	18/11/2019	18/11/2019	10/01/2021	01/11/2021	05/11/2021
Middlemount (L1)	05/11/2021	Ongoing				

### WATER AND WASTEWATER

#### MONTH'S ACHIEVEMENTS:

- Inspection of Dysart Effluent Storage Dam has indicated that there are currently no signs of leaking from the dam wall. A program of ongoing monitoring has begun.
- A potable water irrigation connection pipe at the Moranbah High School was identified and found to be unmetered. Consultation with the school has allowed IRC Networks Team to install a new meter in place to capture the usage of this water.
- Several sewer manholes in Dysart were identified as needing repairs whilst the sewer relining contractor carried out camera inspections of the sewer mains. One of the manholes was found to be missing the lid, thus potentially causing a serious injury risk or machine damage and contributing to network inflow. New surrounds and lid have been installed. Many other sewer manholes that have not been able to be located for many years also have been located in both Moranbah and Dysart.
- New Apprentice Plumber in Clermont has commenced work with IRC.
- Photos have been taken of the irrigation areas on Wastewater Treatment Plants to ensure compliance is achieved.
- Tree removal from Nebo Effluent Storage Dam verification has occurred.
- Repair and vegetation control to the Glenden Effluent Storage Dam and golf course fence line.





Image 1: Glenden ESD and Golf Course renewing a section of fence and tree removal on the eastern corner of the dam.

#### MIDDLEMOUNT WATER TREATMENT PLANT (MMT WTP)

#### **Raw Water Pumps**

On the 31 December Middlemount received 87mm of rain in a short period of time. With this quantity of rain, the water was unable to disperse quickly enough and the area around the Water Treatment Plant flooded. This flooding filled the raw water electric pumps and rendered the pumps unusable.

Plumbers along with operational staff worked through the night connect a diesel pump to the raw water feed pipe to the plant once the water had subsided and the pump well was pumped down.

The raw water electric pumps were removed and sent to Mackay for assessment and repairs. These pumps were repaired, returned to Middlemount, reinstalled, and recommissioned.



Image 2: Standing water at MMT WTP





#### WTP Filters

The sand filters at MMT WTP were found to be underperforming causing a reportable non-conformance.

Following extensive investigation, a cleansing process of the sand was derived and carried out and continues to be implemented. Chemical testing (jar testing) indicates a benefit in changing dosing chemicals to enhance the process throughout the whole plant. Work continues to ensure all avenues are explored and water quality is maintained. Treated water quality was not compromised throughout this period.

#### RAW WATER SOURCES FOR ISAAC REGIONAL TOWNS:

The following diagram provides an update on raw water sources, water levels in dams, water used to date if applicable, and current water restrictions in place for each Isaac regional town.

The status of all storage is currently healthy with no anticipated changes to water restriction levels.



Image 3: St Lawrence weir in full flow.

PAGE 66



#### Glenden

Raw water for Glenden is provided from the Bowen River which can be refilled from Gattonvale off-stream storage and Eungella Dam.

- Newlands Coal Min (Xstrata) N/A
- Bowen River Weir 132.5%
   No Water Restrictions

#### Moranbah

Moranbah's raw water is supplied from two sources: Burdekin Dam through to Burdekin to Moranbah pipeline

Eungella Dam through either BMA or Sunwater's pipelines

Water used to	2022-2023	2023-2024
date		
BMA	1773ML	1249ML
Dyno	50 ML	ML.
Stanmore	150ML	150ML
Sunwater	6 ML	ML.
Pembroke		30ML

**No Water Restrictions** 

#### Clermont

Clermont's raw water is supplied from Theresa Creek Dam. 44mm rain at Theresa Creek Dam. 0.049m below overflow level

No Water Restrictions

#### Nebo

Nebo's raw water is supplied through six bores. The new water treatment plant and reservoir as part of the Nebo Water Supply Project have 2ML storage on site. **No Water Restrictions** 

#### Carmila

Raw water is supplied from two shallow bores located near the Carmila Creek approx. 1km from the WTP. Water is flowing over the weir near the bore. 134mm of rain for the reporting month. No Water Restrictions

#### **St Lawrence**

St Lawrence's raw water is supplied through high lift pump from the St Lawrence Creek Approx. 121mm of rain in St Lawrence township. Water level is 0mt below weir level. No Water Restrictions

#### **Dysart**

Dysart's raw water is supplied from Bingegang Weir in the Mackenzie River which can be re-filled from Fairbairn Dam through Bedford Weir.

• Bingegang Weir 171.58%

**No Water Restrictions** 

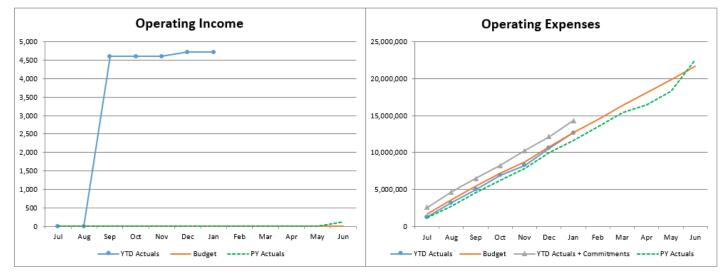
#### Middlemount

Middlemount's raw water is supplied from the Bingegang Weir on the Mackenzie River approx. 60km away. The weir is re-filled from Fairbairn Dam through Bedford Weir. Bingegang Weir 171.58% Fairbairn Dam 35.46% Bedford Weir 133.18% Level 1 Water Restrictions





#### **FINANCIAL REPORT:**



#### **DEVIATION FROM BUDGET AND POLICY:**

Forward commitments indicate a variance to the year-to-date budget which will even out over the remainder of the financial year. An increase in supplier and material costs have been required to meet necessary operational needs and it will be a challenge to stay within the budget allocation. Redistribution of funds will be undertaken in the Q2 budget review.

#### PREVENTATIVE MAINTENANCE PROGRAM

- Online analyser calibration program: Parts for repairs and replacement of equipment have arrived at multiple sites and work has commenced to carry out the repair work to rectify the faulty equipment. This program will support the accurate monitoring of water quality parameters and equipment reliability in all treatment processes.
- **Pump maintenance program**: The contract documents were signed, and a pre-start meeting was held to discuss the service schedule and requirements. This work is to commence at the beginning of March 2024.
- **Generator maintenance program**: A new tender document will be released to the public in February. This maintenance program will include generators managed by E&I and CGFS.
- UV system maintenance: Faults identified during the preventative maintenance condition assessment are being addressed. Replacement parts have begun to arrive, and repair work will commence in February 2024.
- Asset Registry: A meeting with CGFS was held to identify the Water and Waste point of contact and discuss how to deliver Water and Waste services and how to update the asset information in the asset management system. CGFS will develop a template to transfer the data collected from the preventative maintenance programs into the asset registers.

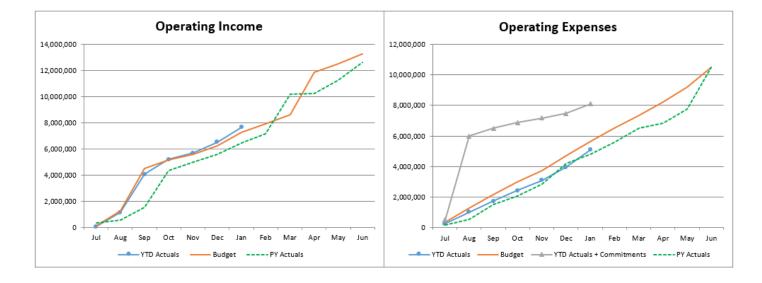


### WASTE SERVICES

#### **PREVIOUS MONTH'S ACHIEVEMENTS:**

- A new Projects and Contracts Coordinator Waste Services has been successfully recruited and will commence on 19 February 2024. The previous incumbent finished at the end of December 2023.
- The Waste Services team continued working with the Projects and Planning team to delivery capital projects at Clermont and Glenden landfill funded by the State Government's Levy Ready Funding Program to ensure they are delivered before the statutory deadline of 30 June 2024.

#### FINANCIAL REPORT:



#### **DEVIATION FROM BUDGET AND POLICY:**

Nil for January 2024.

#### NEXT MONTH'S PROGRAM:

#### Scheduled to Commence During Next Month

Project Name/ Description	Scheduled End Date	Comments/Exceptions
Procurement for Processing of Green waste and other certain wastes	31 March 2024	
Procurement for transition to transfer station – Glenden Waste Facility	30 June 2024	
Moranbah Landfill Gas Recovery	TBC	EOI prepared. Procurement process to follow



### PLANNING AND PROJECT DELIVERY

#### **PREVIOUS MONTH'S ACHIEVEMENTS:**

In January 2023, no new projects were awarded. However, following projects were in the procurement stage during this period:

#### CW233151 - ST LAWRENCE RAW WATER STORAGE AND RAW WATER MAIN:

- The tender for the Water Storage component closed on 18 December 2023, with only one tender response, which significantly exceeded the budget.
- The project manager and superintendent are actively collaborating with the tenderer to explore alternative designs and establish a revised cost aligning with the remaining budget.

#### CW243204 - GLN Landfill to Transfer Station

- This project involves constructing a ramp, retaining walls, and handrails.
- One submission was received for the Request for Quotes (RFQ) on 16 January 2024.
- After seeking clarification on the contractor's understanding of the scope of work and for alternative submissions, the contractor provided the necessary data and offered an alternative price lower than the original submission.
- The contractor's submission is considered reasonable and compliant, and the award recommendation report is in preparation, anticipating the contract award process to follow.

#### CW233155 - CLM WTP Filter Media and Plant Modernisation

- This project includes three sub-projects: Turbidity Analysers installation, Switchgear Upgrade Design and Construct, and Chemical Dosing Upgrade Design.
- The tender analysis for Turbidity Analysers is complete, with the contract award pending the final stages of the procurement process.
- The Design and Construct Switchgear Upgrade and Chemical Dosing Upgrade contracts are currently under review by the Procurement team, with the contract awards expected in February 2024.

#### ACTIVITIES COMPLETED

#### CW222974 – CORP SEWER RELINING:

The project, which was awarded the contract in September 2023, is advancing smoothly. The contractor has successfully finished CCTV camera works for both Dysart and Moranbah. Based on the CCTV inspections, the Operations and Maintenance team has completed the development of the scope of works for relining. The contractor mobilised in Moranbah in early February 2024 to initiate the relining works.





Image 4: Sewer Relining in progress on McCool Street, Moranbah

#### CW233156 - CLERMONT WASTE MANAGEMENT FACILITY WEIGHBRIDGE INSTALLATION:

The design and construct tender closed on 14 November 2023, and following a council resolution, the preferred contractor executed the contract in early January 2024. The pre-start meeting took place on 10 January 2024, and design work is currently in progress. The Contractor has placed orders for the procurement of the weighbridge, gate house, CCTV, boom gate and traffic lights. Construction is anticipated to commence in early April 2024.

#### CW223000 - MORANBAH LANDFILL PHASE 2 STAGE 2:

Construction commenced in August 2023, and the project is approaching practical completion. Expected practical completion is set for February 2024.



Image 5: Moranbah Landfill Access Road





#### CW222983 – MORANBAH WATER TREATMENT PLANT ROOF REPLACEMENT

Ensuring material readiness, the contractor advanced off-site structural welding works for the roof structure components in January 2024. Progress was hindered as the contractor had to attend to emergency works for another council during recent cyclonic weather conditions in the broader region. The delivery of structural steel to the site is anticipated in February 2024. The contractor is scheduled to arrive on-site in early February, with construction completion expected in April 2024.

#### CW233151 - ST LAWRENCE RAW WATER STORAGE AND RAW WATER MAIN:

The construction of the new raw water main, which began in October 2023, has been successfully completed and commissioned in November 2023.

However, regarding the water storage component of the project, the tender closed on 18 December 2023, and only one tender response was received. The quoted price significantly exceeded the available budget.

The project manager and superintendent are actively collaborating with the tenderer to explore alternative design options that fulfill the project's objectives. The aim is to establish a revised cost that aligns with the remaining budget constraints whilst still meeting the original project objectives.

#### CW222971 – CLERMONT WATER NETWORK AUGMENTATION:

The project is currently in the finalisation stage for construction drawings following the approval of 80% drawings. Simultaneously, an extension of time has been requested from the external funding agency and is pending confirmation of approval.

# CW233150 – CLERMONT WATER TREATMENT PLANT FILTER MEDIA REPLACEMENT AND PLANT MODERNISATION:

This project consists of three sub-projects: Turbidity Analysers installation, Switchgear Upgrade Design and Construct, and Chemical Dosing Upgrade Design. The tender analysis for Turbidity Analysers is complete, with the contract award pending completion of the final stages of the procurement process. The Design and Construct Switchgear Upgrade and Chemical Dosing Upgrade contracts are currently under review by the Procurement team, and the contract awards are expected in February 2024.

The external funding agency has been officially informed of the scope change and extension to the completion time in January 2025, with approval pending.

#### CWW243205 - MORANBAH RECTIFICATION OF LANDFILL CELL:

An allocation of \$4.2 million has been budgeted for the project in the 2023/24 financial year.

An external consultant is managing the project and presented a thorough briefing report and project timeline in December 2023.

In response to feedback from IRC Officers, the consultant is in the process of enlisting a geotechnical specialist to conduct a more in-depth examination of site conditions. The objective is to present an improved option analysis, incorporating alternative solutions for remediating the landfill site.





#### FINANCIAL REPORT:

As of 06 February 2024, Water and Wastewater actual expenditure totals \$2,761,611 representing 21% of the budget (\$13,194,593) and a total spend inclusive of tender commitments of \$7,579,527 which represents 57% of the budget.

As of 06 February 2024, Waste Services actual expenditure totals \$6,501,068 representing 42% of the budget (\$15,364,407) and a total spend inclusive of tender commitments of \$9,735,556 which represents 63% of the budget.

The combined Water and Waste actual expenditure totals \$9,262,679 representing 32% of the budget (\$28,559,000) and a total spend inclusive of tender commitments of \$17,315,083 representing 61% of the budget.

The actual expenditure was suppressed in the past month due to the Christmas holiday period.

#### **EXPENDITURE SUMMARY**

Water and Wastewater	January 2024	December 2023
Actuals Program Expenditure to date	\$2,761,611	\$2,611,987
Actual Program Expenditure including Tender commitments to date	\$7,579,527	\$7,451,380
Waste		
Actual Program Expenditure to date	\$6,501,068	\$6,356,243
Actual Program Expenditure including Tender commitments to date	\$9,735,556	\$9,462,931



#### **OPERATIONAL PLAN / BUSINESS PLAN – EXCEPTION REPORTING**

Strategy (i.e., C5)	Service Area	Description	Highlight/Exception, including explanation
16	Effective and Efficient Capital Works Delivery	Implementation of effective project and contract management systems and procedures:	Monitor
		<ul> <li>&gt;90% of the capital program delivered to budget</li> </ul>	
		Implementation of effective project and contract management systems and procedures:	Delay in the delivery of some projects has been reflected in under- expenditure for actuals. Monitor
		<ul> <li>&gt;90% of all subprograms in the Water and Waste capital program are completed on time and in budget</li> </ul>	

#### NEXT MONTH'S PROGRAM:

The Planning and Project team's focus for the upcoming month includes completing tendering for several projects and achieving physical progress in ongoing larger projects.

#### **Capital Projects Update**

For an update on the program at the project level, refer to the Water and Waste 2023-2024 Capital Projects Progress Report and associated attachment.

Report prepared by: SCOTT CASEY Director Water and Waste

Date: 8 February 2024