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

TO BE HELD ON
WEDNESDAY, 11 OCTOBER 2023
COMMENCING AT 1.00PM
COUNCIL CHAMBERS - MORANBAH

DARREN FETTELL Acting

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



LOCAL GOVERNMENT ACT 2009

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;
 - 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 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.
- (4) In this section—

 audio link see the Evidence Act 1977, section 39C.

 audio visual link see the Evidence Act 1977, schedule 3.

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 declare immediately.

AGENDA



WATER AND WASTE STANDING COMMITTEE MEETING OF ISAAC REGIONAL COUNCIL TO BE HELD ON **WEDNESDAY 11 OCTOBER 2023 COUNCIL CHAMBERS, MORANBAH**

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





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1. OPENING OF MEETING

2. APOLOGIES

Mayor Anne Baker

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 1:00 p.m. on Wednesday 13 September 2023.

5. OFFICER REPORTS

EXECUTIVE SUMMARY

5.1

WATER AND WASTE 2023/2024 CAPITAL PROJECTS PROGRESS **REPORT**

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

5.2 WATER AND WASTEWATER PREVENTATIVE MAINTENANCE

PROGRAM

EXECUTIVE SUMMARY

This report summarises the pathway of the Water and Wastewater Preventive Maintenance Program and the outcomes of the program to date.





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6. INFORMATION BULLETIN

6.1

WATER AND WASTE INFORMATION BULLETIN - OCTOBER 2023

EXECUTIVE SUMMARY

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

7. GENERAL BUSINESS

8. CONCLUSION



UNCONFIRMED MINUTES

WATER AND WASTE STANDING COMMITTEE MEETING OF

ISAAC REGIONAL COUNCIL

HELD ON

WEDNESDAY, 13 SEPTEMBER 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 13 SEPTEMBER 2023

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ISAAC REGIONAL COUNCIL

UNCONFIRMED MINUTES OF THE

WATER AND WASTE

STANDING COMMITTEE MEETING

HELD IN COUNCIL CHAMBERS, MORANBAH

ON WEDNESDAY 13 SEPTEMBER 2023 COMMENCING AT 1.00PM

ATTENDANCE Cr Simon West, Division Four (Chair)

Mayor Anne Baker

Cr Carolyn Franzmann, Division Six Cr Viv Coleman, Division Eight

OFFICERS PRESENT Mr Ken Gouldthorp, Chief Executive Officer

> Mr Scott Casey, Director Water and Waste Mr Karl Murdoch, Manager Waste Services

Mr Stephen Wagner, Manager Operations and Maintenance Mr Amal Meegahawattage, Manager Planning and Projects Mrs Zoe Behrendt, Acting Manager Business Services Mrs Tricia Hughes, Coordinator Executive Support

1. OPENING

The Chair declared the meeting open at 1pm and acknowledged the traditional custodians of the land on which we meet today and paid her respects to their Elders past, present and emerging.

ATTENDANCE

Cr Carolyn Franzmann was not in the meeting room at the commencement of the meeting.

Cr Carolyn Franzmann video conferenced into the meeting 1.02pm.







2. APOLOGIES

Apologies have been received from Cr Greg Austen and Cr Kelly Vea Vea.

Resolution No.: W&W0460

Moved: Mayor Anne Baker Seconded: Cr Carolyn Franzmann

That the Water and Waste Standing Committee accepts the apologies received from Cr Greg Austen and Cr Kelly Vea Vea.

Carried

Resolution No.: W&W0461

Moved: Cr Franzmann Seconded: Mayor Anne Baker

That the Water and Waste Standing Committee accepts Cr Viv Coleman as an alternate member for today's meeting.

Carried

3. DECLARATION OF CONFLICTS OF INTEREST

No conflict of interests declared this meeting.

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 9 August 2023.







Resolution No.: W&W0462

Moved: Cr Franzmann Seconded: **Mayor Baker**

That the minutes from the Water and Waste Standing Committee meeting held in Council Chambers, Moranbah on Wednesday 9 August 2023 are confirmed.

Carried

ATTENDANCE

Mrs Zoe Behrendt left the meeting room at 1.18pm and returned to the meeting room at 1.19pm.

5. OFFICERS REPORTS

Water and Waste Directorate 2023/2024 Capital Projects Progress Report -September 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 Directorate 2023/2024 Capital Projects Progress Report.

Resolution No.: W&W0463

Moved: Cr Coleman Seconded: Cr Franzmann

That the Committee recommends that Council:

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

Carried





ATTENDANCE

Mayor Anne Baker left the meeting room at 1.56pm.

6. INFORMATION BULLETIN REPORTS

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Water and Waste Information Bulletin – September 2023

EXECUTIVE SUMMARY

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

OFFICER'S RECOMMENDATION

That the Committee recommends that Council:

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

Resolution No.: W&W0464

Moved: Cr Coleman Seconded: Mayor Baker

That the Committee:

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

Carried

7. GENERAL BUSINESS

No general business this meeting.





8. CONCLUSION		
There being no further business, the Chair declared the r	meeting closed at 2.17pm.	
These minutes were confirmed by the Committee at the \on Wednesday 11 September 2023 in Moranbah.	Water and Waste Standing Committee Meeting held	
	// DATE	





MEETING DETAILS	Water and Waste Standing Committee Meeting Wednesday 11 October 2023
AUTHOR	Amal Meegahawattage
AUTHOR POSITION	Manager Planning and Projects

5.1	WATER AND WASTE 2023/2024 CAPITAL PROJECTS PROGRESS
	REPORTS

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.

OFFICER'S RECOMMENDATION

The Committee recommends that Council:

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

BACKGROUND

Progressive updates of the financial and physical position of projects in the 2023/2024 Water and Waste Capital Works program are required to ensure that Council is aware of the progress of and risk to the delivery of the program.

IMPLICATIONS

The attached Water and Waste 2023/2024 Capital Projects Progress Summary spreadsheet 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 May 2023, yellow indicating a cost overrun of 0-10%, and green indicating no issues. Brief commentary is provided to explain the status of each project, with additional commentary provided in the Water and Waste Issues Report for significant risks.

Delivery of the Water and Waste 2023/2024 Capital Works Program is essential to meet the identified timeframes of the 2023/2024 financial year.

During September 2023, one project was issued:

1. **CW222974 CORP Sewer Network Relining**: In May 2023, the Evaluation Panel recommended granting the contract for CW222974 - CORP Sewer Relining to the preferred tenderer.



OTHER KEY CAPITAL PROJECTS

- CW222983 CLM TCD FLOATING OFF-TAKE STRUCTURE: Initially scheduled for completion by September 15, 2023, this project faced an unexpected challenge when it was discovered that intakes 1 & 2 were positioned below the silt level. As a result, work was halted for safety reasons, and a quote for silt dredging was requested. Multiple cost-effective solutions are currently being explored, requiring additional funding.
- 2. CW223000 MBH WASTE MANAGEMENT FACILITY CONSTRUCTION OF LINED LANDFILL CELL #2: Construction of this project, supported by external consultant as the construction superintendent and quality control engineer, is progressing smoothly and remains on track for completion by mid-December 2023. The project encompasses excavation, shaping, and quality testing. Collaborative efforts among the contractor, consultant, and IRC are ensuring project success.
- 3. CW223019 MORANBAH 400ML RAW WATER DAM REMEDIATION WORKS: Commencing construction in August 2023, this project faced a hold due to a scope increase in late August. The discovery that Type 2 material remediation areas required Type 1 material due to site conditions necessitated a revised Scope of Works (SOW) and additional funding. The contractor's schedule is pending.
- 4. CW233156 CLERMONT WASTE MANAGEMENT FACILITY RECONFIGURATION AND WEIGHBRIDGE INSTALLATION: Tender documentation preparation is complete, with an anticipated market release date of September 26, 2023, following review by the Procurement Team.

BENEFITS

Council can see a monthly progress report detailing the progress of projects in the Water and Waste 2023/2024 Capital Program. This report communicates risks/failures/delays that have been identified within the Water and Waste 2023/2024 Capital Works program.

CONSULTATION

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

BASIS FOR RECOMMENDATION

To improve business 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 2023/2024 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 2023/2024 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: 27 September 2023

Report authorised by:

SCOTT CASEY

Director Water and Waste

Date: 1 October 2023

ATTACHMENTS

 CONFIDENTIAL Attachment 1 – Water and Waste Capital Projects Progress Summary Spreadsheet – October 2023

REFERENCE DOCUMENT

Nil

PAGE 16 HAS INTENTIONALLY BEEN REMOVED DUE TO CONFIDENTIAL REASONS



MEETING DETAILS	Water and Waste Standing Committee Meeting Wednesday 11 October 2023
AUTHOR	Seungchan Bang
AUTHOR POSITION	Water and Waste Maintenance Planner

5.2	WATER	AND	WASTEWATER	PREVENTIVE	MAINTENANCE
	PROGRA	M UPD	PATE		

EXECUTIVE SUMMARY

This report summarises the implementation pathway of the Water and Wastewater Preventive Maintenance Programme and the progress of the program to date.

OFFICER'S RECOMMENDATION

That the Committee recommends that Council:

1. Notes the contents of the Water and Wastewater Preventive Maintenance Program Update.

BACKGROUND

Preventative maintenance to the Water and Wastewater infrastructure has been attempted in various ways over the years with varying degrees of success. Although these initiatives were successful in part, it was recognised that further detailed program development was required to assist with the long-term protection and maintenance of the Water and Wastewater (W&W) infrastructure.

Prior to the commencement of the current iteration of the preventative maintenance program, the water and wastewater operations and maintenance team had allocated resources predominantly into reactive maintenance and repairs due to the number of breakdowns experienced. This report has been developed to reveal the outcomes of the last six (6) months' progress, the impact of the program and its future direction.

The preventive maintenance program is aiming to improve the reliability of W&W assets and equipment over the longer term and consequentially reduce reactive maintenance costs and increase service reliability.

The key progress milestones in the preventative maintenance program (Program) include:

- a) Preventive Maintenance Program Identification (Attachment 1) Equipment used for water treatment and wastewater treatment process was listed and catagorised by definitions and functions. An initial total of 28 preventive maintenance programs were identified and nominated as separate discrete maintenance programs.
- b) Priority Setting and Job Planning (Attachment 2)
 The identified and categorised programs were prioritised by key criteria: Risk and Value.



Risk infers the quality of impacts on the treatment process in case of breakdowns resulting in the community and end-users receiving reduced service levels.

Value means how significant the equipment is to the operation of a treatment plant, the monitor of the treatment process and whether a treatment plant has redundancy in its equipment to provide continued water and wastewater services.

The preparation period for a single contract was assumed to be three (3) months including a minimum of 21 days for public release. The contract period was designated for two (2) years with two (2) additional one-year extensions optional, at the sole discretion of IRC. This length of contract will secure strong ownership of the contract by the successful contractors.

The schedule of works detailing the timing of the programs recommended within the Water and Wastewater Preventive Maintenance Program were grouped into three timeframes:

Short Term (FY22/23)

- 1. Carry out the planned preventive maintenance programs and develop new programs based on the priority.
- 2. Record service reports, certificates, and recommendations to identify the issues.
- 3. Identify the discovered issues and likelihood of breakdowns to reduce the risk of emergency repairs.
- 4. Implement the recommendations and carry out repairs.
- 5. Assess the equipment condition to identify the reliability of the asset equipment.
- Evaluate equipment lifespan to decide on where to allocate the resources.
- 7. Share the relevant information with other directorates/departments to help the decision-making process.
- 8. Discover any new preventive maintenance programs.

Medium Term (FY23/24 - FY24/25)

- 9. Track the equipment conditions based on the service reports to monitor variations.
- 10. Evaluate the awarded tenderers to sustain the ability of the service and optimise the service cost.
- 11. Re-tender the expired preventive maintenance programs.
- 12. Manage the allocated and future budgets for the preventive maintenance programs.
- 13. Register the asset equipment information into the asset management platform (Tech1)
- 14. Assist detailed design of capital projects to correlate with current equipment types and makers.
- 15. Update of new installed equipment into the existing contract.

Long Term (FY25/26 onwards)

- 16. Monitor variations of the equipment conditions and develop the equipment condition improvement plans to sustain functions and capabilities.
- 17. Register and update asset information based on the asset management plan.



This action plan remains under review and will evolve along with the program in response to changing priorities and available budget allocations.

Progress of the Preventative Maintenance Program

The program to assess the current equipment conditions and maintain the treatment plant equipment proactively has been in progress for the last year. Since the commencement of the program, nineteen (19) preventive maintenance programs have been implemented from the thirty-one items originally identified. The seven (7) scheduled programs completed in FY23/24 quarter 1 include:

- i. 25 Weigh Scale and Benchtop Lab Scale Annual Service
- ii. 23 Pressure Vessel Annual Service and Certification
- iii. 98 Water and Wastewater Treatment Plant Online Analyser Annual Service
- iv. 110 WTP and WWTP Flow Meter Annual Service
- v. 14 WTP and WWTP Pest Control Bi-Annual Service
- vi. Moranbah WWTP Belt Filter Press Annual Service
- vii. 19 WTP and WWTP Electric Gate and Door Annual Service

An additional ten (10) preventative maintenance (PM) activities already have contracts or purchase orders in place from the preceding 12 months and will continue through the FY23/24 financial year.

- i. 15 Air Compressor and 15 Blower Bi-Annual Service
- ii. 34 Generator Annual Service (Whole of Council Contract)
- 30 Overhead Crane and Lifting Beam Annual Service
- iv. 50 Sewage Pump Station and Treatment Plant Well Cleaning Annual Service
- v. 100 Sewage Pump Station and Raw Water Pump Station Pump Annual Service
- vi. 205 Safety Equipment Bi-Annual Service
- vii. 61 Benchtop Lab Analyser Annual Service
- viii. 6 Wastewater Treatment Plant Inlet Screen Annual Service
- ix. 14 WTP and WWTP Pest Control Bi-Annual Service
- x. 9 Chlorination System Bi-Annual Service

A further two PM activities are currently in the procurement stage but will commence in this financial year:

- i. 6 UV Disinfection System Annual Service
- ii. 229 WTP and WWTP Pump Annual Service



The implementation of these 19 PM contracts will be achievable within the approved FY23/24 budget (\$750k) with an estimated spend of (\$701k).

The FY23/24 Water and Wastewater maintenance budget has allocated in total of \$1.295M, consisting of \$545,000 in reactive maintenance and \$750,000 in preventive maintenance for a total of 14 treatment plants.

Table 1 – FY 23/24 maintenance budget

Township	Location	Reactive Maintenance Budget	Preventive Maintenance Budget	Total Maintenance Budget
Moranbah	WTP	\$ 80,000	\$ 79,955	\$ 159,955
Clermont	WTP	\$ 45,000	\$ 64,463	\$ 109,463
Dysart	WTP	\$ 35,000	\$ 64,926	\$ 99,926
Middlemount	WTP	\$ 20,000	\$ 46,099	\$ 66,099
Nebo	WTP	\$ -	\$ 58,635	\$ 58,635
Glenden	WTP	\$ 20,000	\$ 30,488	\$ 50,488
Carmila	WTP	\$ -	\$ 20,789	\$ 20,789
St Lawrence	WTP	\$ 50,000	\$ 20,046	\$ 70,046
Moranbah	WWTP	\$ 120,000	\$ 103,131	\$ 223,131
Clermont	WWTP	\$ 55,000	\$ 41,245	\$ 96,245
Dysart	WWTP	\$ 40,000	\$ 72,028	\$ 112,028
Middlemount	WWTP	\$ 15,000	\$ 60,339	\$ 75,339
Nebo	WWTP	\$ 30,000	\$ 45,685	\$ 75,685
Glenden	WWTP	\$ 35,000	\$ 42,171	\$ 77,171
Tot	al	\$ 545,000	\$ 750,000	\$ 1,295,000

The \$750,000 preventative maintenance budget has been allocated across the 14 water and wastewater treatment plants proportionally based on the actual assets at each plant the maintenance demand that they present. Preventative maintenance is required at all plants, and this has been acknowledged and addressed in the PM program.

Within the scope of the PM contracts is a requirement for the contractor to conduct asset condition assessments and report to council, also identifying assets requiring repair or replacement. These repairs identified as a consequence of the PM work are assessed by the Operations and Maintenance staff to determine whether they present a risk to the ongoing water and wastewater service delivery. Items which are not deemed to immediate necessity or priority are recorded for inclusion in the annual budget preparation cycle.

OBSERVATIONS

- i. The preventative maintenance program is rolling out in line with the defined schedule.
- ii. Active PM contracts have already discovered assets which were on the point of failure or were contributing to elevated risk.
- iii. PM contractors are identifying maintenance needs which can be addressed as part of the overall maintenance or capital programs.



IMPLICATIONS

Asset condition assessments gathered through the preventative maintenance program will inform future investment decision making and will form a key information source for both the asset class asset management plans and the future preventative maintenance programs.

Greater visibility of asset conditions allows for improved risk and asset management but will also increase the quantum of maintenance work required until such time as the asset condition reaches a stable base.

The use of preventative maintenance will in time prevent assets being run to the point of failure.

Discovery of assets in poor condition will generate additional items for consideration for either operational maintenance or capital investment.

Original budget forecasts prepared at the commencement of this preventative maintenance program predicted that the reactive maintenance (RM) expenditure would start to decrease in the second year of the preventative maintenance program but also recognised that there would be a transitionary period where both PM and RM would be required. This will be monitored and reported as part of the quarterly budget reviews.

The preventive maintenance program is seen as a transformative approach from reactive responses to equipment failure and breakdowns, to proactive condition assessment and preventive repairs prior to the occurrence of operational discontinuity. The Water and Wastewater department acknowledges the value of the preventive maintenance program already and expects positive outcomes from Council's investment in the program. Preventive maintenance is expected to ensure the continuous operations in the provision of drinking water, treatment of sewerage, production of recycled water, and reduction of the risk of breaches of regulatory compliance.

CONSULTATION

- Water and Wastewater Team
- Maintenance Planner Water and Waste
- Treatment Plant Supervisor South
- Treatment Plant Supervisor North
- Project Managers Planning and Project
- Coordinator Water and Wastewater
- Manager Planning and Projects
- Manager Operations and Maintenance
- Director Water and Waste

BASIS FOR RECOMMENDATION

The recommendation is to note the progress of the Water and Wastewater preventive maintenance program.

ACTION ACCOUNTABILITY

The Manager Operations and Maintenance will be responsible for ensuring the works are included in yearly operational budgets and support the preventative maintenance programs to ensure they are successfully delivered.



KEY MESSAGES

Implementation of the Water and Wastewater Preventive Maintenance Program will increase the reliability of the water and wastewater treatment processes and support community service delivery.

Preventative maintenance will in time minimise the instances of assets running to failure and unplanned outages.

Implementation of the preventative maintenance program provides greater visibility of asset condition and allows for more informed investment decision making through the corporate budget planning cycle.

Report prepared by:

SEUNGCHAN BANG

Water and Waste Maintenance Planner

Date: 29 September 2023

Report authorised by:

SCOTT CASEY

Director Water and Waste

Date: 5 October 2023

ATTACHMENTS

- Attachment 1 Preventive Maintenance Program Identification
- Attachment 2 Priority Setting and Job Planning

REFERENCE DOCUMENT

Nil



MEETING DETAILS	Water and Waste Standing Committee Meeting Wednesday 15 March 2023	
AUTHOR	Seungchan Bang	
AUTHOR POSITION	Water and Waste Maintenance Planner	

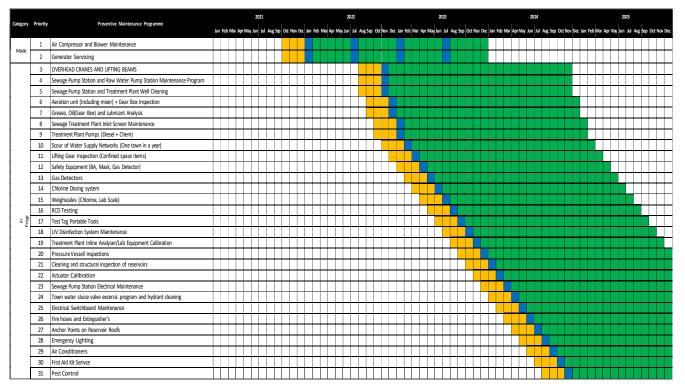
ATTACHMENT 1 – PREVENTIVE MAINTENANCE PROGRAM IDENTIFICATION

Category	Item	Preventive Maintenance Program
	1	Air Compressor and Blower Maintenance
Made	2	Generator Servicing
	3	Frist Aid Kit Serivce
	4	Sewage Pump Station Electrical Maintenance
	5	Weighscales (Chlorine, Lab Scale)
	6	Test Tag Portable Tools
	7	Chlorine Dosing system
	8 Overhead cranes and lifting beams	Overhead cranes and lifting beams
	9	Lifting Gear Inspection (Confined space items)
	10	Emergency Lighting
	11	Actuator Calibration
	12	Sewage Pump Station and Treatment Plant Well Cleaning
	13	Sewage Pump Station and Raw Water Pump Station Maintenance Program
_ E	14	Sewage Treatment Plant Inlet Screen Maintenance
In Program	15	Treatment Plant Pumps (Diesel + Chem)
Pro	16	Safety Equipment (BA, Mask, Gas Detector)
드	17	UV Disinfection System Maintenance
	18	Pressure Vessell Inspections
	19	Fire hoses and Extinguisher's
	20	Treatment Plant Inline Analyser/Lab Equipment Calibration
	21	Aeration unit (Including mixer) + Gear Box Inspection
	22	Gas Detectors
	23	Grease, Oil(Gear Box) and Lubricant Analysis
	24	Electrical Switchboard Maintenance
	25	Anchor Points on Reservoir Roofs
	26	RCD Testing
	27	Air Conditioners
	28	Pest Control



MEETING DETAILS	Water and Waste Standing Committee Meeting Wednesday 11 October 2023
AUTHOR	Seungchan Bang
AUTHOR POSITION	Water and Waste Maintenance Planner

ATTACHMENT 2 - PRIORITY SETTING AND JOB PLANNING







MEETING DETAILS	Water and Waste Standing Committee Meeting Wednesday 11 October 2023		
AUTHOR	Scott Casey		
AUTHOR POSITION	Director Water and Waste		

6.1

WATER AND WASTE INFORMATION BULLETIN – OCTOBER 2023

EXECUTIVE SUMMARY

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

OFFICER'S RECOMMENDATION

That the Committee:

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

BACKGROUND

The attached Information Bulletin for October 2023 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: 1 October 2023

Report authorised by:

DARREN FETTELL

Acting Chief Executive Officer

Date: 6 October 2023

ATTACHMENTS

Attachment 1 – Water and Waste Information Bulletin – October 2023

REFERENCE DOCUMENT

• Nil



DATE: October 2023

6.1 WATER AND WASTE

DIRECTORATE HIGHLIGHTS

REWARD AND RECOGNITION

This month, staff gathered to acknowledge and celebrate outstanding performance from their colleagues and long-standing commitment to Isaac Regional Council. Eight staff were nominated for notable work performance and four staff received long service awards. This was the first occasion of an initiative conceived and implemented by the W&W team to recognise behaviours which exceed expectations.













SCHOOL VISITS

Waste Services presentations to Nebo Primary School and Moranbah State Primary School.

EMERGING RISKS:

Sewer Pump Stations

During September there were several pump stations returned to full operational service including Clermont Pump Station 1.

There are still 2 pump stations on limited duty (single pump) awaiting the repairs to the second pump. Dysart Pump Station 1 requires a motor rebuild and Moranbah Pump Station 5 has had the pilar base and guides fail. These replacement parts are on order and await their delivery so that they can be installed.

Resourcing Levels

Water and Wastewater treatment has seen an increase in enquiries for the vacant position within the Treatment Plant Operations area. Although there has been an increase in enquiries, there are limited opportunities for applicants to obtain suitable housing within Moranbah.

Bushfire Risks

Due to the build up of fuel load over the past couple of years and the dry conditions the risk of bushfire impact on operational sites is increasing.

BUSINESS SERVICES

PREVIOUS MONTH'S PROGRAM:

The Business Services team focus for September included customer queries relating to water billing, general administrative and meeting support for the directorate along with supporting the operations and maintenance team with annual statutory reporting and compliance activities.

WATER & WASTE COMPLIANCE - SEPTEMBER 2023

All external compliance reporting is currently up to date.

Non-compliance with the Department of Environment and Science (DES)

Date of breach	Community	Medium	Location	Parameter	Written notification to Regulator
05/09/2023	Dysart	Weighbridge	WMF	Out of Service	Yes
	Nebo				
	Middlemount				
06/09/2023	Clermont	Treated Effluent	WWTP	Free Chlorine	Yes
06/09/2023	Dysart	Treated Effluent	WWTP	TN	Yes
24/09/2023	Dysart	Fire	WMF	Environment	Yes



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

Date of breach	Community	Medium	Location	Parameter	Written notification to Regulator
13/09/2023	Middlemount	Network	Emu Park	Free Chlorine	Yes

DEVIATION FROM BUDGET AND POLICY:

All budgets are on track as the end of Quarter 1.

OPERATIONAL PLAN / BUSINESS PLAN - EXCEPTION REPORTING

Performance Plan / Operational Plan Action	Update / Comment		
5-Year Price Path - Water Utility Charges	Project milestones have been revised with the project to be delivered in 23/24		
Meter Reading Strategic Plan	Actions for 23/24 to be allocated		

NEXT MONTH'S PROGRAM:

Water Billing

Meter/Taggle replacements and data cleansing are required to complete the integration of meter data between Aqualus and Technology 1. This is a project that the Systems team is leading and has been delayed by the Cyber Event.

Compliance & IMS

The Compliance and IMS team will be focused on IMS processes and finalisation of annual statutory reporting during October.

Water Restrictions

No changes to Water Restrictions during September 2023.

CURRENT & PROJECTED LEVEL 1 (L1)		LEVEL 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 (LT)	05/11/2021					_

WATER AND WASTEWATER

MONTH'S ACHIEVEMENTS:

The inception meeting for the DWQMP (Drinking Water Quality Management Plan Review) has been completed. This provided insights into potential improvements to the plan.

Continued uninterrupted supply of water and treated wastewater, mostly within our guidelines and standards, and requirements, while addressing several departmental issues, and equipment breakdowns.



Trainee Operators attending college-type training to assist with their ongoing training and assessments.

Moranbah and Clermont Wastewater Treatment Plants Process risk assessments and Structural Condition assessments carried out.

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.



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 92%

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.

omm of rain

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	95ML
Dyno	50 ML	ML
Stanmore	150ML	ML
Sunwater	6 ML	ML
Pembroke	0	

No Water Restrictions

St Lawrence

St Lawrence's raw water is supplied through high lift pump from the St Lawrence Creek Approx. Omm of rain in St Lawrence township. Water level is 0.75mt below weir level. Level 0 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 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 58%

Fairbairn Dam 34.5%

Bedford Weir 10%

Level 1 Water Restrictions

Clermont

Clermont's raw water is supplied from Theresa Creek Dam. 0mm rain at Theresa Creek Dam. 0.775m below overflow level No Water Restrictions

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FINANCIAL REPORT:

DEVIATION FROM BUDGET AND POLICY:

Maintenance budget is experiencing higher than expected asset replacement costs (see the Preventive Maintenance Report submitted).

MAINTENANCE PLANNER

Pre-start meeting for the water treatment plant and wastewater treatment plant online analysers has been completed and the schedule of the service has been accepted. The awarded tenderer will visit the sites and carry out the service from 6th November.

The chlorination system aims for disinfection of the water treatment process and wastewater treatment process. To secure the operation of the chlorination system with chlorine gas in nine (9) treatment plants, two preventive maintenance programs for chlorination system maintenance and weigh scale maintenance will be integrated and carried out in October 2023. These services will help sustain a safe workplace and secure reliable water and wastewater treatment processes.

Flow meter accuracy testing and adjustment services are planned to be carried out from 3rd October for 14 treatment plants. This annual service will increase the reliability of flow readings to help plant operation.

TECHNICAL OFFICER REFERABLE DAMS & EFFLUENT STORAGES

Theresa Creek Dam

Twice a week structural inspection and seepage data collection, monthly data collection to monitor left retaining wall movement, yearly compliance reporting requirement to the regulator, and updating Theresa Creek Dam Operational Maintenance Manual and Site Operational Plans forming one document.

Moranbah

Inspection of Effluent Storage Dams and Overflow Storage Dam.

Glenden

Inspection of the Glenden Water Treatment Plant Raw Water Reservoir and Wastewater Treatment Plant Effluent Storage Dam and Effluent Storage Ponds.

St Lawrence

Inspection of St. Lawrence weir completed.

Nebo

Inspection of the Nebo Effluent Storage Dams.

Dysart

Inspection of Dysart Effluent Storage Dam and Effluent Storage Ponds.

Middlemount

Inspection of the Wastewater Treatment Plant Effluent Storage Dam, and Raw Water Reservoir at the Water Treatment Plant.



WATER AND WASTEWATER NETWORKS

Replacement of two 100mm water meters at the BMA Camp in Moranbah as these were identified as potential faulty meters. Monitoring of these meters to further ascertain possible improvements will be carried out over the next six months.

Investigation of the water feeds to the Moranbah Civic Centre and the neighbouring Child Care Centre continues to identify the feed to each building so that separate water meters can be established.

Unmetered services to the Moranbah Motocross and Motorcycle clubs have been rectified so that accurate water records can be obtained.

Installation of a new treated water analyser feed has been installed at the Middlemount Water Treatment Plant. This will ensure that the analyser will operate correctly indicating potential issues with water quality in the future.

WASTE SERVICES

PREVIOUS MONTH'S ACHIEVEMENTS:

Recycle Mate

Following on from the information provided on Recycle Mate in August's Information Bulletin, Manager Waste Services attended a workshop on the initiative in Townsville on Tuesday 19 September. The workshop was facilitated by the Office of Circular Economy and the Managing Director - Adaptation Environmental Support Pty Ltd (Recycle Mate implementation partner with the Australian Council of Recycling). During the workshop attendees learned about current opportunities and new developments underway and, how to navigate data accounts, update information, and could provide feedback on gaps existing in current recycling or safe disposal options in each local government area.





Waste and Recycling Presentation - Primary Schools

Waste Services received a request to attend two local primary schools and present on sustainable waste management. Projects and Contracts Coordinator Waste Services, Sara Sheridan, and Environmental and Sustainability Officer, Nicole Sharrock attended Nebo Primary School and Moranbah State Primary School and delivered three presentations. Officers received positive feedback and expressions of interest for further sessions in the future.





Waste Tonnage and Waste Levy

August saw a total of 2,900 tonnes to landfill equating to \$264,750 in waste levy. September is estimated to be lower, tracking at 2,415 tonnes landfilled on 28 September.

The waste levy monthly average to date in 23/24 is \$248,165.

PREVIOUS MONTH'S ISSUES:

On Sunday, 24 September a bush fire started near the Dysart Waste Management facility. Unfortunately, it spread onto the site. Officers were proactive in contacting 000 and closing the facility. The fire spread and burned stockpiled materials on the site, fortunately, it did not reach the active landfill. The fire reignited onsite on Wednesday 27 September. Officers acted promptly and the small fire was put out. A detailed report is being prepared for the Department of Environment and Science (DES).

Recognition of Service

Waste Management Officer Cherie Jeffs was recognised for her 10 years' service.





FINANCIAL REPORT:

DEVIATION FROM BUDGET AND POLICY:

Nil for September 2023.



OPERATONAL PLAN / BUSINESS PLAN - EXCEPTION REPORTING

	1		Waste & Red	cycling Contract 22/23 I	Contract 22/23 FY		
Number of missed services		Collection of Missed Service		Bin Repair / Replacements			
крі	<10/5000 Services = less than 139 missed services for the month	No of missed bins collected within 36 hours	90% within 36 hours of contractor being notified	No of requests	No of requests completed within 5 working days	90% within 5 workin days of request	
Jul-23	471	466	99%	40	38	95%	
Aug-23	692	692	100%	27	27	100%	
	Waste and Recycling Performance 22/23 FY						
	Tonnes to Landfill (ex Clean Soil)	Tonnes to RRA Stockpiles	Tonnes diverted via Kerbside Recycling	Tonnes sent off site for Sale or to processor	% of Waste diverted from Landfill	No of Kerbside Recycling Services V Presentation rate	
KPI	N/A	N/A	N/A	N/A	>25%		
Jul-23	2,806	702	43	407	22%	8,593 = 42%	
Aug-23	2,900	1,618	54	252	18%	10,495 = 44%	
	Compliance 22/23 FY						
	Compliance with Environmental Authority (EA)	Notice of scheduled site closures	Customer complaints non-price related	Nuisance complaints (odour/litter)		No of Transactions	
КРІ	No of reportable regulatory notices	>7 days notice	Number of complaints / 1,000 transactions / site <10 / annum	Number of complaints / 1,000 transactions / site <20 / annum		N/A	
Jul-23	0	0	0	0	6,203	i-	
Aug-2	0	0	0	1 -Neighbouring business odour complaint (MBH WMF)	5,893		

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	30 November 2023	
Procurement for transition to transfer station – Glenden Waste Facility	30 June 2024	
Preparation for National Recycling Week	30 October 2023	
Moranbah Landfill Gas Recovery	TBC	Preparation of an EOI to procure suitable providers

DEVELOPING INITIATIVES / ISSUES:

Continuing planning and collaboration of annual comms with BMC team including new waste management campaign.



PLANNING AND PROJECT DELIVERY

PREVIOUS MONTH'S ACHIEVEMENTS:

In September 2023, the following project was awarded to the successful tenderer:

CW222974 - CORP Sewer Relining

Additionally, the following tenders were in progress during August 2023:

CW233156 Clermont Waste Management Facility Reconfiguration and Weighbridge
Installation: The consultant has completed the preparation of the tender documentation, anticipating
its release to the market on September 26, 2023, in accordance with their project timeline. As of the
time of writing this report, the documentation has been reviewed by the Procurement Team.

ACTIVITIES COMPLETED

CW222983 - CLM TCD FLOATING OFF-TAKE STRUCTURE

Initially, the project was on track for completion by September 15, 2023. However, after floating the HDPE pipe, connecting the inlet screen, and preparing the pontoon, an unforeseen issue arose. Both Intakes 1 & 2 were found to be situated below the silt level, which was an unexpected latent condition, despite recent successful dredging in the area (see image below).

In light of this discovery, work had to be halted, and the contractor was instructed to remove all materials and the platform from the water due to safety concerns. Additionally, a quote was requested for dredging the silt to facilitate a connection to the water tower. IRC has received a quote from the contractor, currently under review, and multiple solutions are being explored, with emphasis on practicality and cost-effectiveness. It's anticipated that additional funds will be required to complete the revised Scope of Works (SOW).



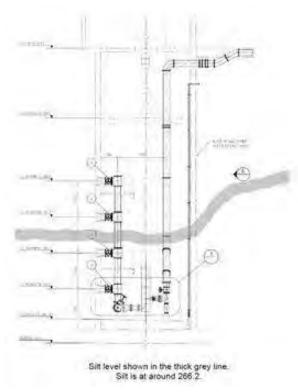


Image 1 - Cross Section and Silt Level

CW223000 - MBH WASTE MANAGEMENT FACILITY CONSTRUCTION OF LINED LANDFILL CELL #2

Since the construction began in August 2023, essential support services will be provided by a consultancy firm throughout the construction phase, including construction superintendency, design revisions, and quality assurance testing. The project is progressing smoothly and is in line with the revised program. Currently, landfill cell excavation and shaping are underway, with construction materials arriving on-site. The contractor has also completed mulching of timber and vegetation on-site and stockpiled the mulch within the landfill area. Quality testing is being conducted on-site, and the excavation of the stormwater pond is nearly finished. The contractor is actively collaborating with the consultant and IRC to ensure a successful outcome.

According to the contractor's revised construction schedule, the project is expected to reach completion by mid-December 2023. This timeline adjustment accounts for the project's smooth progress and aligns with the revised program. Overall, the project is on track, and the collective efforts of the contractor, consultant, and IRC are contributing to its success.







Image 2: Drainage works

Image 3: Clearing and Excavation in progress



Image 4: Shaping of the bed of the cell



Image 5: Shaping of the bed of the cell is nearly complete



In early August 2023, the contractor-initiated mobilisation and commenced construction operations for this project. However, on August 28, 2023, the project was put on hold due to a significant increase in the Scope of Works (SOW) and material quantities. It was discovered that sections initially designated for Type 2 remediation in the design for internal wall remediation actually required Type 1 to match the actual site conditions, resulting in this expanded SOW. External consultant conducted a comprehensive review with the contractor and reached agreement on most of the recommendations provided. Currently, the contractor has been requested to provide the revised SOW and program delivery schedule. Additional funding will be required for this project, with the exact amount to be confirmed once IRC receives further information from the contractor and supervising consultant.



Image 6: Earthworks in progress along the dam

CW222974 - CORP SEWER RELINING

In May 2023, the Evaluation Panel recommended awarding the contract for CW222974 - CORP Sewer Relining to the preferred tenderer.

PREVIOUS MONTH'S ISSUES:

In the previous month, the Planning & Projects department faced challenges related to disruptions in construction progress and unexpected increases in the scope of works due to unforeseen site conditions and circumstances.

Resourcing challenges within the project management area persisted and to address this the Planning & Projects department has engaged several external consultants to provide construction superintendency services for larger projects. Furthermore, the department is set to welcome a new Project Manager in early October, following a successful recruitment process.



FINANCIAL REPORT:

As of 03 October 2023, Water and Wastewater actual expenditure totals \$928,059 representing 7.73% of the budget (\$12,002,593) and a total spend inclusive of tender commitments of \$5,266,272 which represents 43.88% of the budget.

As of 03 October 2023, Waste Services' actual expenditure totals \$798,827 representing 5.60% of the budget (\$14,258,407) and a total spend inclusive of tender commitments of \$8,933,759 which represents 62.65% of the budget.

The combined Water & Waste actual expenditure totals \$1,726,887 representing 6.57% of the budget (\$26,261,000) and a total spend inclusive of tender commitments of \$14,200,030 representing 54.07% of the budget.

EXPENDITURE SUMMARY

Water & Wastewater	September 2023	August 2023
Actuals Program Expenditure to date	\$928,059	\$192,416
Actual Program Expenditure including Tender commitments to date	\$5,266,272	\$4,501,821
Waste		
Actual Program Expenditure to date	\$798,827	\$33,595
Actual Program Expenditure including Tender commitments to date	\$8,933,759	8,906,079



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
		 >90% of the capital program delivered to budget 	
		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
		 >90% of all subprograms in the W&W capital program are completed on time and in budget 	

NEXT MONTH'S PROGRAM:

The Planning and Project team's focus for the upcoming month is on finalising the tender documents, commencing the construction of newly awarded projects, and continuing site inspections on projects in the construction phase.

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:	Report authorised by:
SCOTT CASEY	DARREN FETTELL
Director of Water and Waste	Acting Chief Executive Officer
Date: 3 October 2023	Date: 6 October 2023