AIRPORT, WATER AND WASTE COMMITTEE MEETING

AGENDA

18 JULY 2017

Your attendance is required at a meeting of the Airport, Water and Waste Committee to be held in the Council Chambers, 232 Bolsover Street, Rockhampton on 18 July 2017 commencing at 3.00pm for transaction of the enclosed business.

CHIEF EXECUTIVE OFFICER
12 July 2017

Next Meeting Date: 15.08.17

Please note:

In accordance with the *Local Government Regulation 2012*, please be advised that all discussion held during the meeting is recorded for the purpose of verifying the minutes. This will include any discussion involving a Councillor, staff member or a member of the public.

TABLE OF CONTENTS

1 OPENING

2 PRESENT

Members Present:

Councillor N K Fisher (Chairperson)
The Mayor, Councillor M F Strelow
Councillor R A Swadling
Councillor A P Williams
Councillor C R Rutherford
Councillor M D Wickerson

In Attendance:

Mr R Cheesman – General Manager Corporate Services (Exeucitve Officer)
Mr E Pardon – Chief Executive Officer

3 APOLOGIES AND LEAVE OF ABSENCE

Councillor Ellen Smith - Leave of Absence from 10 July 2017 to 28 July 2017

4 CONFIRMATION OF MINUTES

Minutes of the Airport, Water and Waste Committee held 16 May 2017

5 DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA

6 BUSINESS OUTSTANDING

Nil

7 PUBLIC FORUMS/DEPUTATIONS

7.1 ROCKHAMPTON FLIGHT PATH CHANGES

File No:	**8238**
Attachments:	**Nil**
Authorising Officer:	**Ross Cheesman - Deputy Chief Executive Officer**
Author:	**Scott Waters - General Manager Regional Development and Aviation** **Tracey Baxter - Acting Manager Airport**

SUMMARY

Mr Neil Hall of Air Services Australia would like to provide a verbal update to the committee regarding flight path changes effecting Rockhampton. These changes have been brought forward and are now expected to be implemented on 17 August 2017 and an aeronautical publication date of 22 June 2017.

OFFICER'S RECOMMENDATION

THAT that deputation from Air Services Australia regarding flight changes be received.

COMMENTARY

Air Services Australia are seeking to address Council in relation to the proposed changes to the existing flight paths for Rockhampton. Whilst further information and clarification will be made at the meeting, the proposal is to implement new technologies to improve safety and predictability at Rockhampton, particularly in Instrument Meteorological Conditions (IMC). In Visual Meteorological Conditions (VMC) the existing flexibility of aircraft tracking will remain.

The proposed procedures allow aircraft to navigate on predictable FMS managed tracks using performance based navigation (RNP 1). This is part of a nationwide program to ensure consistency and safety.

Aircraft operating in IMC at Rockhampton are not currently on standard arrival and departure routes. Aircraft tracking varies depending on the disposition of the traffic and dynamic pilot and air traffic control requirements.

Implementation of the latest performance based navigation SIDs and STARs provides pilots with improved predictability and safety in IMC, and air traffic control with separation standards built into the airspace design for departing and arriving aircraft. This improves safety by reducing complexity and workload for air traffic controllers and pilots during periods of poor weather.

The proposed flight paths have been designed to overfly residential areas that are currently overflown or over non-residential areas.

SUMMARY OF IMPACTS

Arriving aircraft

The proposed standard arrival flight paths are over existing flight tracks where there would be noticeable aircraft noise levels (above 60dBA). Changes to aircraft tracking may be noticed by residents to the north and east of Rockhampton with noise levels over residential areas not expected to increase. In good weather aircraft are expected to fly as they do now.

Departing aircraft

The proposed standard departure flight paths have been located as close to existing flight paths as possible over residential areas to ensure there are no newly overflown areas. In good weather aircraft are expected to fly as they do now.

SUMMARY

In conclusion the deputation will discuss the proposed Rockhampton Airport standard arrivals and departures and in particular how the flight paths will provide pilots with improved predictability and fuel management using on board systems, and air traffic control with separation standards built into the airspace design for departing and arriving aircraft.

Furthermore the proposed flight paths will not overfly new residents. In good weather aircraft will generally continue to fly as they do now, with only the occasional flight expected to use the standard arrivals and departures. This is due to the flexibility required by air traffic control to integrate the departures and arrivals with how aircraft are managed in the airspace further out from Rockhampton. When the standard arrivals and departures flight paths are in use, residents in some areas may notice greater consistency in where aircraft are tracking.

8 OFFICERS' REPORTS

8.1 ROCKHAMPTON AIRPORT - MONTHLY OPERATIONS REPORT - MAY AND JUNE 2017

File No:	**7927**
Attachments:	**1. Rockhampton Airport Monthly Operational Report - May and June 2017**
Authorising Officer:	**Ross Cheesman - Deputy Chief Executive Officer**
Author:	**Scott Waters - General Manager Regional Development and Aviation** **Tracey Baxter - Acting Manager Airport**

SUMMARY

The monthly operations and annual performance plan report for the Rockhampton Airport for May and June 2017 is presented for Councillors information.

OFFICER'S RECOMMENDATION

THAT the Rockhampton Airport Operations and Annual Performance Plan Report for May and June 2017 be 'received'.

COMMENTARY

The monthly operations and annual performance plan report for the Rockhampton Airport of the Regional Development and Aviation Department is attached for Council's consideration.

CONCLUSION

It is recommended that the monthly operations and annual performance plan report for the Rockhampton Airport for May and June 2017 be received.

ROCKHAMPTON AIRPORT MONTHLY OPERATIONS REPORT - MAY AND JUNE 2017

Rockhampton Airport Monthly Operational Report – May and June 2017

Meeting Date: 18 July 2017

Attachment No: 1

MONTHLY OPERATIONS REPORT

Rockhampton Airport

Period Ended 30 June 2017

OBJECTIVES

The key objectives of the Rockhampton Airport are to safely deliver aeronautical and non-aeronautical services. For aeronautical activities this includes all activities that are vital to airport activity and their removal would render the Airport unable to function in an aeronautical capacity. They include the runways, taxiways and aircraft parking apron areas. For non-aeronautical activities this includes all other activities undertaken by Rockhampton Airport and includes the operation of the terminal building, car park facilities, concessions and related leased and licences, etc. All of those activities are ancillary to the operation of a modern airport.

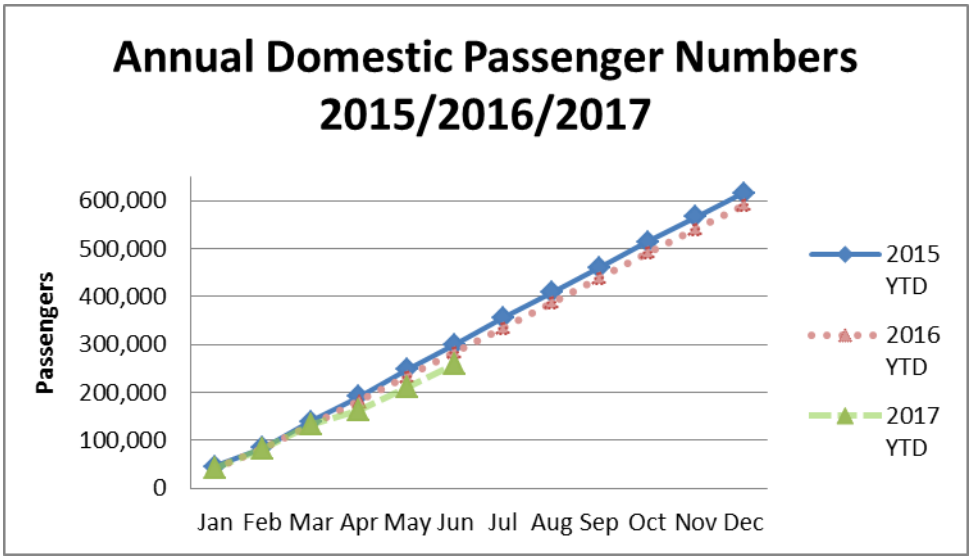
VARIATIONS, ISSUES AND INNOVATIONS

Nil.

AIRPORT COMMERCIAL

Passenger Numbers

Domestic passenger numbers for June 2017 were: 48,099 compared to June 2016: 50,261.



Patient Travel Subsidy Scheme Car Park Waiver

During June 2017, 188 vehicles had $8,169 in car park fees waived. The total period of time these vehicles were in the Airport car parks was an average of 2.11 days stay per passenger.

AIRPORT OPERATIONS

Audit and Compliance

There are no outstanding audit or compliance matters to report.

Military Exercises

Australian, New Zealand and U.S. Defence forces commenced set up of equipment and deployment of aircraft at Rockhampton Airport in preparation for Exercise Talisman Sabre 2017.

Planning continued for the upcoming military Exercise Wallaby 2017.

Airport Lighting System

The Airport Lighting System was commissioned on the 5th June, ongoing rectification works to be undertaken in the coming months.

General

Capricorn Helicopter Rescue Service continued construction of their new hangar facility on Canoona Road.

AIRPORT FACILITIES

Terminal Standby Power System

The new system is operational. The Generator Paralleling Agreement with Ergon Energy has been finalised. Power outage to remove the redundant switchgear was successfully completed on the weekend of the 10th and 11th June 2017. Final inspections, commissioning and testing to meet specified requirements have been completed. The installation of fences around the new standby generators and new switchboard are now complete. The remaining work related directly with the new generators is connection to the Airport Building Management System for continuous system monitoring which is scheduled for completion in July 2017.

Planning is progressing for the removal of the redundant generator and in-ground fuel tank, which has a current target date of late July early August.

Terminal Concourse Toilets Refurbishment

The contractor to remove the existing entry doors to all four main Terminal toilets has been engaged and materials have been procured. Planning for works has commenced, with a current target date of mid to late July.

Terminal Air Conditioning System

A consultant engineer has commenced developing a strategy to manage the replacement of Terminal Air Conditioning Assets through the Capital Replacement program over the next ten years.

Replacement of Aeroworx Storage/Workshop/Office/Lunchroom Building (Lease Site BD)

RRC Duty Planner has advised that a Flood Records Search be requested from RRC Development Engineers who advised that a Development Application is required with the inclusion of a Flood Hazard Assessment. Development Application is in the initial stages of development.

Hangar power supply switchboard has been replaced and upgraded.

LINKAGES TO OPERATIONAL PLAN

1. COMPLIANCE WITH CUSTOMER SERVICE REQUESTS

The response times for completing the predominant customer requests in the reporting period for June 2017 are as below:

All Monthly Requests (Priority 3)
Airport 'Traffic Light' report
June 2017

	Balance B/F	Completed in Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	On Hold	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and incomplete)	Avg Completion Time (days) Q4
			Received	Completed								
Airport General Enquiries	0	0	1	1	0	0	10	10.00	3.56	4.33	1.44	4.20
Airport Services General Enquiries	0	0	0	0	0	0	10	0.00	0.00	0.00	0.00	0.00

2. COMPLIANCE WITH STATUTORY AND REGULATORY REQUIREMENTS INCLUDING SAFETY, RISK AND OTHER LEGISLATIVE MATTERS

Safety Statistics

The safety statistics for the reporting period are:

	SECOND QUARTER		
	April	**May**	**June**
Number of Lost Time Injuries	0	0	0
Number of Days Lost Due to Injury	0	0	0
Total Number of Injuries	0	1	1
Number of Completed Hazard Inspections	n/a	N/A	N/A

Risk Management Summary

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Aircraft accident, incident or malfunction occurs within the Rockhampton airport precinct resulting in possible death or injury, financial loss, interruption to airline service delivery, damage to infrastructure and reputation damage to the airport	Moderate 6	Upgrade airport lighting system.	Stage 1: 30/06/2014 Stage 2: 30/06/2015 Stage 3: 30/04/2017	90%	Now 100% Stage 1 ALER complete and main runway transformers replaced to improve circuit reliability from zero MΩ to 0.17MΩ as at December 2014.Back to zero as at end November and rectification being carried out in Early December. Late December readings back up to an acceptable 0.13MΩ level. Stage 2 Pit & Duct completed mid November 2014 and rectification works commenced August 2016. Stage 3 commenced, estimated completion date end July 2017.
Security breach or threat at the airport resulting in possible	Moderate 6	Replace hard key system on all gates and	30/06/2015	90%	High risk gates in Main apron installed New locks now

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
death or injury, reputation damage to the airport, additional costs, disruption to airline services due to airport closure, infrastructure damage, fines in relation to a regulatory breach		access points with proximity card electronic card system so lost cards can have access withdrawn.			being rolled out in GA area. Further locks to be installed on perimeter fence. The Airport system requires a software update which is expected to occur in late July 2017.
Airport revenue decreases over a sustained period resulting in the airport performance KPI's not being met, budgetary impacts, reduced availability of funds for capital programs.	Moderate 5	Redevelop the airport terminal to increase retail revenue.	Terminal 1/07/2018	80%	The options for Terminal redevelopment will be further considered as part of the Airport Master Planning process.
Airport assets not maintained, upgraded, inspected or monitored effectively in accordance with regulatory requirements resulting in possible death or injury, reputational damage, compliance failure, reduced service delivery, WH&S fine	Moderate 6	Facility maintenance and condition assessment inspection schedules are in the process of being completed and detailed in conquest. Consultant engaged to identify critical infrastructure and to load into Conquest to ensure regular maintenance	Stage 1: 30/6/2015 30/06/2016	80%	Main Runway condition re-assessment by AECOM completed and recommendations included in 10 yr Capex program. HV capacity evaluation being progressed with Ergon Energy for medium and long term Chilled water system capacity improved with better control system and new heat exchange units High Risk Fire

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
		is performed. Upgrade of RPT and GA Apron flood lighting to meet LUX standards. Review of Asset Management Plan			Hydrant Systems now completed Air-conditioning condition report completed. HV Transformers condition evaluation completed. Roads pavement condition assessment completed Airport Council owned buildings condition assessment completed and priority 1 defects being addressed. FRW has undertaken condition report on mains water and replacement of priority section completed final section in Capex program.

Legislative Compliance & Standards

Legislative Compliance Matter	Due Date	% Completed	Comments
Annual Runway Friction Testing	March 2017	100%	Friction testing was undertaken on 11 May 2017 by an external contractor. The finalised report has been received which indicates that both runways were above the Maintenance Planning Level with the exception of a small section of Runway 15/33 at the entrances of Taxiways A and E and the threshold of Runway 22.
Biannual Review of Airport Security Risk Register	September 2017	0%	Review assesses security measures and procedures to consider if they are adequate to meet the requirements of the local security risk context statement.
Annual Review of Airport SMS Risk Register	October 2017	0%	Review is conducted at least annually to determine whether the nominated risk treatments/controls remain valid for the risks identified. The RRC Risk Calculator is used to quantify the current risk rating.
Annual Airport Electrical Inspection	November 2017	0%	Aerodrome Operation Support Pty Ltd conduct an annual inspection of the key aviation related electrical components at the aerodrome.
Annual Airport Technical Inspection	November 2017	0%	Aerodrome Operation Support Pty Ltd conduct an annual inspection of the aerodrome facilities, equipment, procedures and OLS.
Emergency Exercise (Field Top Exercise)	May 2018	0%	An on site emergency exercise is required to be conducted at least every second year. The 2017 exercise scenario will be the basis for the 2018 on site exercise.

ACHIEVEMENT OF CAPITAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

Capital Program

The 16/17 FY Capital Program has been revised to ensure achievable delivery within the financial year.

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD Actual Including Committals
CAPITAL WORKS PROGRAM					
987693 – Improve Terminal Access for People with Disabilities.	Ongoing	December 2016	**Complete** All Terminal disability toilet doors have been reconfigured.	$6,000	$2,700
Commentary: Implementation of systems and equipment that will assist people with disabilities to access the Airport terminal building and facilities.					
959133 – RPT Apron Lighting	29/08/13	Project Concept Plan & Scope of Works - June 2017	**WIP** Installation of six new switchboards at each apron light pole, four complete, two remaining. Replacement and upgrade of electrical supply cables to ensure continued operation and to support future upgrade, completed. Conduct design review to consider LED Lighting and review aircraft parking requirements prior to installation.	$105,000	$70,372
Commentary: To obtain regulatory compliance a condition assessment was conducted in 2014 with upgrade recommendations identified one area remaining non-compliant. Engineering assessment confirmed additional lights could be installed on existing poles. Original concept design under review to investigate options of LED installation and review parking layout. Testing of electrical supply cables identified that they were close to failure. Project to be delivered in two stages, Stage 1 16/17 – Replace and upgrade electrical supply cables, Lighting Design Review and Project Concept, Stage 2 17/18 – Implement compliant system.					
959135 – GA Apron Lighting	17/02/12	Project Concept Plan & Scope of Works - June 2017	**WIP** Stage 1 – Install three lights to allow RFDS to operate new Patient Transfer Facility, completed 2015. Remainder of project postponed to allow reconfiguration of cross runway.	$2,100	$0

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD Actual Including Committals
CAPITAL WORKS PROGRAM					
			Conduct design review to consider LED Lighting and review of aircraft parking requirements prior to installation.		
Commentary: To obtain regulatory compliance a condition assessment was conducted in 2014 with upgrade recommendation. Original concept design under review to investigate options of an LED installation and review aircraft parking layout. System remains non-compliant due to inability to infringe the airspace of Runway 04/22; this will be rectified in Stage 3 following Runway 04/22 displacement. Project to be delivered in three stages, Stage 1 15/16 – Install three lights for RFDS Operations, Stage 2 16/17 – Lighting Design Review and Project Concept, Stage 3 18/19 – Implement compliant system.					
987694 – Refurbish Terminal Concourse Toilets	Early 2015	Stage 1 – July 2017	**WIP** Contractor engaged of Stage 1 – Removal of entry doors from all four main toilets. Materials have been procured, planning for works has commenced.	$80,000	$25,045
Commentary: It has been identified that the terminal toilets are not meeting the current passenger needs and impede passenger flow through the terminal. Toilets need to be refurbished and reconfigured to improve customer service levels. Project to be delivered in three stages, Stage 1 – Removal of toilet entry doors, Stage 2 – Reconfigure Southern toilet facilities, Stage 3 – Reconfigure Northern toilet facilities.					
987712 – Replace General Aviation Power Switchboards	Early 2015	Phase 1 - April 2017	**Complete** Area 3 (Aeroworx) Switchboard replacement design has been finalised in preparation for implementation in FY 17/18.	$17,250	$4,564
Commentary: A condition assessment conducted in 2015 has identified that several General Aviation switchboards are in various stages of deterioration and will require replacement. Project Concept Design has been developed to accommodate future potential business growth and system upgrade requirements. Replacement of Area 3 (Aeroworx) Switchboard identified as a priority due to age and non-compliance, design 16/17 ($17,250), implement 17/18 ($60,000). Remaining switchboards replacements have been postponed until to 2026/27.					
1047109 – Replace existing storage-workshop-office-lunchroom (site BD)	Sept 15	Stage 1 – June 2017	**WIP** Initial electrical works to replace and relocate hangar switchboards is complete. Proposed building works have been presented to the RRC Duty Planner who advised: • A Flood Records Search be	$65,000	$3,391

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD Actual Including Committals
CAPITAL WORKS PROGRAM					
			conducted – completed • A Development Application will be required including a Flood Hazard Assessment – in progress. • Hanger power supply switchboard upgraded and replaced - completed		
Commentary: Several issues with the buildings within the Aeroworx complex were identified in the RRC Asset Building Inspection in 2014. Electrical switchboard issues were identified in condition assessment conducted in 2015. Office building and electrical switchboards are beyond repair therefore requiring replacement. The project is to be delivered in two stages, Stage 1 16/17 - extend hanger and renew electrical connection ($65,000), Stage 2 17/18 – Replace office and lunchroom ($100,000).					
987926 – Upgrade terminal standby power generator	Sept 15	August 2017	**WIP** Construction works are progressing to plan. New system now operational. Terminal BMS being connected for monitoring. Additional works required installation of fencing around the new generators and switchboard (complete), removal of redundant switchgear (complete) and removal of redundant generator (complete) and removal of in-ground fuel tank ($150,000).	$427,400	$471,158
Commentary: Current generator only supplies a portion of the Terminal, it failed during cyclone Marcia and failed again not long after and replaced with a hire generator. The replacement generators are an essential component of the Airport Business Continuity Plan.					
987723 – Replace Air Conditioning Chilled Water Unit	Jan 17	Concept Plan & Scope of Works - August 2017	**WIP** Engineering consultancy services have been engaged to assist in Developing a Project Concept Plan & Scope of Works for the complete Terminal Air Conditioning System, for approval.	$15,000	$0
Commentary: The Chiller unit has reached the end its expected life. This has been quantified by several component failures over recent years. With the current load on the chiller it is required to operate at 100% capacity to cool the Airport Terminal during the hottest portion of the year.					

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD Actual Including Committals
CAPITAL WORKS PROGRAM					
The project will consist of a concept (scope of works), design, construction and commissioning stages. While this project continues over several years the initial concept and design will be for the entire project.					
987727 –Master planning and reconfiguration	Late 2015	July 17	**WIP** Completion of Airport Masterplan	$66,430	$0
Commentary: Ongoing engagement with LEAPP.					
987685 – Renewal of aviation security infrastructure	Ongoing	Ongoing	**WIP** Finalising design requirements to install automatic vehicle gate at Airside Security Gate 1.	$55,134	$0
Commentary: Operational need identified to replace Airside Security Gate 1 due to emergency access requirements and high usage during military exercises.					
959150 – Runway Lighting System Replacement	18/12/11	31/08/17	**WIP** • Stage 1 – Practical completion issued 24 April 2014. List of final defects repaired. • Stage 2 – Practical completion has been issued. Issues with initial Contractor being available to repair defects. Current on-site contractor have commenced defect rectification. • Stage 3 – Currently working through the commissioning and regulatory process. Decommissioning of current system to commence pending	$823,539	$608,861 (Excluding committals)

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD Actual Including Committals
CAPITAL WORKS PROGRAM					
			regulatory approval.		

Commentary:

Major Projects are managing this project; please refer to the Major Projects Monthly Report for more detail.

Stage 1 – Airfield Lighting Equipment Room (ALER) – Construction of a new ALER to house the electrical and control equipment associated with the new Aeronautical Ground Lighting System (AGL).

Stage 2 - Pit & Duct Network for Main Runway and Taxiways – Installation of the electrical pit and duct network to house the main electrical and control wiring network associated with the new AGL System.

Stage 3 - AGL System for Main Runway and Taxiways – Installation of the electrical and control equipment and network, including light fittings, for the new AGL System. This stage also includes the installation of the standby generator set required to support the new AGL System.

3. ACHIEVEMENT OF OPERATIONAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

As at period ended June 2017 – 100.00% of financial year lapsed.

Project	Revised Budget	Actual (incl. committals)	% budget expended	Explanation
Drainage Study for Future Developments	$47 916	$38 067	79%	**Completed** This study is to determine the best options for a new road off Hunter Street to open up land for development and effects of the footprint of any new developments on the floodplain and how these can be mitigated in order for the developments to proceed. The study is progressing with input from flood modelling initially, of a local flood event. This project will proceed with additional flood modelling with estimates of proposed anticipated future development footprints.

4. DELIVERY OF SERVICES AND ACTIVITIES IN ACCORDANCE WITH COUNCIL'S ADOPTED SERVICE LEVELS

Non-Financial Performance Targets & Required Outcomes

Required Outcomes compared for the same period in 2015/2016

	Monthly Target	Result Monthly / YTD
Passenger Numbers**	0%	-4.30% / -5.36%
Aircraft Movements*	0%	-36.82% / -9.95%
Bird Strikes	3 per month	1 / 30
Lost Time Days – workplace injuries	0	0 / 0
Reported Public Injuries on Airport Precinct	0	0 / 1
Customer Requests Actioned	100%	100% / 100%
Airline Engagement Meetings	Every 3 months	Yes / Yes
Military Exercise Briefings Attended	100%	Yes / Yes

*Aircraft Movements – June 2017 figures were not available on Airservices Australia website at the time of lodging the report. April 2017 figures were utilised for statistical data and therefore year to date (YTD) data is only up until April 2017.

AIRPORT FINANCIAL

Summary

Total revenue is slightly below the percentage of year elapsed at 98.86% which is primarily due to lower than anticipated passenger services charges. Operating expenditure is also lower than the percentage of year elapsed at 95.43% resulting in a current overall surplus position for the Airport.

This position is expected to change once accrual journals and depreciation actuals are posted for year end.

Capital

Overall Airport's capital expenditure is below the percentage of year elapsed at 75% of the March revised budget. The majority of the Airport's capital expenditure YTD relates to the runway lighting power distribution switching system replacement, upgrade of the terminal standby power generator, replacement of the CSB equipment and the RPT apron lighting project.

End of Month General Ledger - (Operating Only) - GROUP NO LONGER USED

As At End Of June 2017

Report Run: 06-Jul-2017 17:02:40 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget $	Revised Budget $	EOM Commitments $	YTD Actual $	Commit + Actual $	Variance %	On target 100% of Year Gone
REGIONAL DEVELOPMENT & AVIATION							
AIRPORT							
Airport Operations							
Revenues	(10,100)	(10,100)	0	(9,878)	(9,878)	98%	✗
Expenses	2,320,244	1,909,733	19,823	1,562,684	1,582,507	82%	✓
Transfer / Overhead Allocation	155,750	155,750	0	123,044	123,044	79%	✓
Total Unit: Airport Operations	*2,465,894*	*2,055,382*	*19,823*	*1,675,849*	*1,695,672*	**82%**	✓
Airport Facilities							
Revenues	(596,300)	(589,798)	0	(542,531)	(542,531)	92%	✗
Expenses	4,076,659	4,149,527	526,976	3,376,144	3,903,119	81%	✓
Transfer / Overhead Allocation	88,930	88,930	0	31,111	31,111	35%	✓
Total Unit: Airport Facilities	*3,569,289*	*3,648,659*	*526,976*	*2,864,724*	*3,391,699*	**79%**	✓
Airport Administration							
Revenues	(55,000)	(55,000)	0	(91,624)	(91,624)	167%	✓
Expenses	3,700,513	4,062,431	1,177	3,950,166	3,951,343	97%	✓
Transfer / Overhead Allocation	5,086,626	3,908,923	0	4,660,836	4,660,836	119%	✗
Total Unit: Airport Administration	*8,732,139*	*7,916,353*	*1,177*	*8,519,379*	*8,520,556*	**108%**	✗
Airport Commercial							
Revenues	(15,182,255)	(14,484,748)	0	(14,322,427)	(14,322,427)	99%	✗
Expenses	412,894	862,314	26,196	741,794	767,991	86%	✓
Transfer / Overhead Allocation	2,040	2,040	0	1,344	1,344	66%	✓
Total Unit: Airport Commercial	*(14,767,321)*	*(13,620,394)*	*26,196*	*(13,579,288)*	*(13,553,092)*	**100%**	✗
Total Section: AIRPORT	*0*	*0*	*574,172*	*(519,336)*	*54,836*	**-118030986%**	✓

8.2 FRW MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT AS AT 30 JUNE 2017

File No:	**1466**
Attachments:	**1. FRW Monthly Operations and Annual Performance Plan as at 30 June 2017** **2. Customer Service Standards as at 30 June 2017** **3. Customer Service and Financial Targets as at 30 June 2017** **4. Non Compliance Comments as at 30 June 2017**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Jason Plumb - Manager Fitzroy River Water**

SUMMARY

The Monthly Operations and Annual Performance Plan Report for Fitzroy River Water (FRW) as at 30 June 2017 are presented for Councillors information.

OFFICER'S RECOMMENDATION

THAT the FRW Monthly Operations Report and Annual Performance Plan quarterly report as at 30 June 2017 be received.

COMMENTARY

The Monthly Operations and Annual Performance Plan Report for FRW of the Regional Services department are attached for Council's consideration.

FRW is required to provide a quarterly report on its performance against financial and non-financial performance targets and key strategies as adopted in the Annual Performance Plan for 2017/18. Ordinarily this has been a separate report. As most of the information is repeated in the monthly operations report they have been combined into one report commencing this month

FRW report to various external agencies and stakeholders, the data in these reports is presented based on water and sewerage schemes. The format of reporting actual non-financial performance against targets in accordance with the requirements of the Annual Performance Plan has been modified to be consistent with the external reporting requirements and is presented in Attachment 2.

FRW MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT AS AT 30 JUNE 2017

FRW Monthly Operations and Annual Performance Plan as at 30 June 2017

Meeting Date: 18 July 2017

Attachment No: 1

MONTHLY OPERATIONS REPORT AND ANNUAL PERFORMANCE PLAN QUARTERLY REPORT – FITZROY RIVER WATER

Period Ended 30 June 2017

VARIATIONS, ISSUES AND INNOVATIONS

Manager's Overview

Overall FRW's performance throughout the 4th quarter was generally as expected with performance against customer service standards and other key reporting metrics continuing at a high standard despite a small number of quarterly targets not being met. This outcome was despite the major river flooding event which impacted FRW's normal operations and capital project delivery activities somewhat during most of April. Overall, total water production remains lower than the previous financial year due largely to the unseasonal winter rainfall received in July 2016 but also due to reasonably regular rainfall since then. Capital project delivery has continued steadily with a number of significant projects continuing or being completed during this quarter.

Innovations

FRW is currently completing a capital upgrade of the North Rockhampton Sewerage Pump Stations located near the North Rockhampton STP. This project is achieving a complete electrical and mechanical upgrade of these two important pump stations as well as some significant safety upgrades to the walkway and access structures at these sites. A new freestanding electrical switchroom was constructed to ensure flood immunity but also to incorporate a fire suppression system to protect the electrical infrastructure against a fire hazard. Four new energy efficient pumps and a new pumping control system were installed to renew the old equipment and within the first month of operation the new pumps have delivered in excess of a 15% decrease in electricity costs with further improvement expected with some additional changes to the control system. This project has been completed by SJ Electrics using local subcontractors for a substantial part of the project which together had a total value of approximately $930,000.

Variations / Concerns

As well as the lower than expected water consumption YTD, the raw water quality in the Fitzroy River has also differed to previous years, with significantly higher levels of turbidity being sustained since July 2016. This variation has a positive effect in that it has prevented the development of the typical dry season cyanobacteria blooms in the river, but the higher turbidity raw water requires the increased use of treatment chemicals and therefore increases the cost to treat water during this period.

The major flood event that followed TC Debbie had a significant impact on FRW's normal operations including the delivery of some capital projects. Despite this natural disaster, the long term impacts in FRW's assets and operations are negligible due to the planning and preparation for this type of event following the learnings of other recent similar floods.

Compliance Matters - Drinking Water Quality

The quality of the drinking water supplied by FRW has been of a very high standard throughout this quarter. The levels of Electrical Conductivity and Sodium are relatively low compared to previous years although some slight increases in salinity have been observed with some river flows in May and June. All water quality test results have been compliant with Queensland Government and Australian Guideline targets. Drinking water quality complaints have remained at relatively low levels and the ongoing moderate levels of turbidity in the raw water have continued to prevent the typical spring blue-green algae season from developing.

Improvements / Deterioration in Levels of Services or Cost Drivers

In late June, the Department of Environment and Heritage Protection (EHP) conducted compliance inspections at the Rockhampton and Gracemere STPs. Officers from EHP did not find any issues of concern or non-compliance at any of the sites inspected. EHP commended FRW for the high standard that each site was presented in and also indicated support for the work being done towards decommissioning the West Rockhampton STP. This was good feedback from the regulator especially given the relatively short time that STPs have had to recover since the major flood event in April.

LINKAGES TO OPERATIONAL PLAN

1. COMPLIANCE WITH CUSTOMER SERVICE REQUESTS

The response times for completing the predominant customer requests in the reporting period for 30 June 2017 are as below:

	Balance B/F	Completed In Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	Work Orders Issued	On Hold	Avg W/O Issue Time (days) 12 months	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and incomplete)	Avg Completion Time (days) Q4
			Received	Completed										
Water / Sewer Asset Enquiries	0	0	1	1	0	0	0	0.00	2	1.00	10.11	7.69	0.40	0.33
Network Construction - Reworks (Reinstatement Proj	0	0	0	0	0	0	0	0.32	1	0.00	5.00	2.40	2.40	0.00
Network Construction - Planned Works (Scheduled Re	0	0	0	0	0	0	0	0.33	1	0.00	0.00	1.77	0.33	0.00
Customer Service - Rebate Residential FRW USE ONLY	2	0	22	20	4	0	0	0.00	30	0.95	5.19	5.01	3.68	3.09
Customer Service - Rebate Undetected Leaks	9	9	21	9	2	0	10	0.00	20	3.11	11.41	17.10	16.33	7.95
Customer Service - Standpipe Enquiry/Read	0	0	1	1	0	0	0	0.00	2	3.50	5.43	5.18	1.00	6.17
Customer Service - Water Exemption Request	0	0	0	0	0	0	0	0.00	5	0.00	0.00	0.00	0.00	0.00
Development - Applications	0	0	0	0	0	0	0	0.00	10	0.00	0.00	0.00	0.00	0.00
Network Systems (Network Analysis Water or Sewer)	0	0	0	0	0	0	0	0.00	7	0.00	1.50	4.67	1.00	1.00
Development - Strategic Sewer	1	1	0	0	0	0	0	6.54	10	0.00	9.00	4.00	4.00	9.00
Development - Strategic Water	0	0	0	0	0	0	0	0.00	10	0.00	0.50	4.25	0.33	1.00
Environment and Water Conservation Enquiry	0	0	0	0	0	0	0	0.00	5	0.00	5.00	5.00	0.00	0.00
Finance - Irrigators/Water Allocations (Asset)	0	0	4	2	2	0	0	139.92	7	4.33	5.30	5.06	4.00	5.25
Network Services - No Water (Asset)	0	0	12	12	0	0	0	0.18	1	0.17	0.86	0.60	0.57	1.08
Network Services - Reactive Sewerage Block (Asset)	6	6	45	45	0	0	0	1.27	1	1.02	16.94	14.86	19.12	4.88
Network Services - Sewer Reimbursements	0	0	1	1	0	0	0	0.06	7	7.33	6.75	5.66	4.28	4.86
Network Services - Sewer Inflow Inspection/Enquiry	0	0	4	3	1	0	0	1.66	7	0.00	4.32	5.20	8.48	3.22
Network Services - Water Leaks (Asset)	0	0	98	92	3	0	0	1.02	1	0.98	1.14	1.22	0.85	1.12
Network Services- Poor Water Pressure (Asset)	0	0	4	4	0	0	0	0.90	1	2.00	2.72	2.02	1.79	1.79
Process - Tradewaste	1	1	8	6	2	0	0	-0.46	7	4.80	3.83	3.51	2.37	4.21
Network Services - Lids/Cover (Asset)	2	1	2	1	2	0	0	-1.36	1	1.27	3.81	2.67	2.69	4.25
Network Services - Meter Maintenance (Asset)	31	26	103	50	58	52	0	1.07	1	10.19	5.89	4.01	4.27	6.72
Network Services Private Works/Standard Connection	0	0	2	2	0	0	0	0.00	5	4.67	2.80	2.19	1.33	2.91
Network Services - Reinstatements (Asset)	4	3	3	3	1	0	0	2.72	1	3.71	4.02	3.88	3.57	4.88
Network Services Special Read Enquiry (Pty Srch)	0	0	2	0	2	0	0	0.00	10	0.00	7.75	5.83	3.89	7.00
Network Services - Water Meter Reading Enquiry	4	4	11	9	1	0	1	61.44	5	3.20	6.07	5.52	3.80	4.20
Process - Odour (Sewer Only) (Asset)	0	0	2	2	0	0	0	3.16	1	1.25	1.50	1.51	0.50	0.94
Process - River Quality	0	0	0	0	0	0	0	0.00	2	0.00	0.00	0.00	0.00	0.00
Process - Drinking Water Quality (Asset)	0	0	7	6	1	0	0	5.06	1	1.22	0.85	1.22	0.51	1.00
Water Meter Read Search - "NOT FOR CSO"	23	22	82	67	16	0	0	0.00	90	3.18	5.42	5.35	5.40	4.15

Comments and Additional Information

FRW uses Pathway escalations to monitor service performance compliance to the Customer Service Standards. The last column is the best indicator of average completion times for standard jobs.

2. COMPLIANCE WITH STATUTORY AND REGULATORY REQUIREMENTS INCLUDING SAFETY, RISK AND OTHER LEGISLATIVE MATTERS

Safety Statistics

The safety statistics for the reporting period are:

	FOURTH QUARTER 2016/17		
	April	**May**	**June**
Number of Lost Time Injuries	0	0	1
Number of Days Lost Due to Injury	35	29	32
Total Number of Incidents Reported	5	6	5
Number of Incomplete Hazard Inspections	3	0	0

Hazard inspections are being completed however FRW processing of any rectification actions can delay meeting the end of month cut-off date for HR reporting.

Treatment and Supply

- No lost time injuries for the month.
- No employees on long term lost time injuries.
- One incident reported for the month. An employee was hit in the side of the head by a small rock after it flew through the side window of a work vehicle as a truck passed nearby.

Network Operations

- One lost time injury for the month.
- One employee currently on a long term lost time injury.
- Three safety incidents were reported for the month.

The lost time injury for the month involved a staff member sustaining a knee injury while exiting a trench after carrying out a water main repair. One of the above incidents involved minor asset damage, while one incident involved a minor strain/sprain injury.

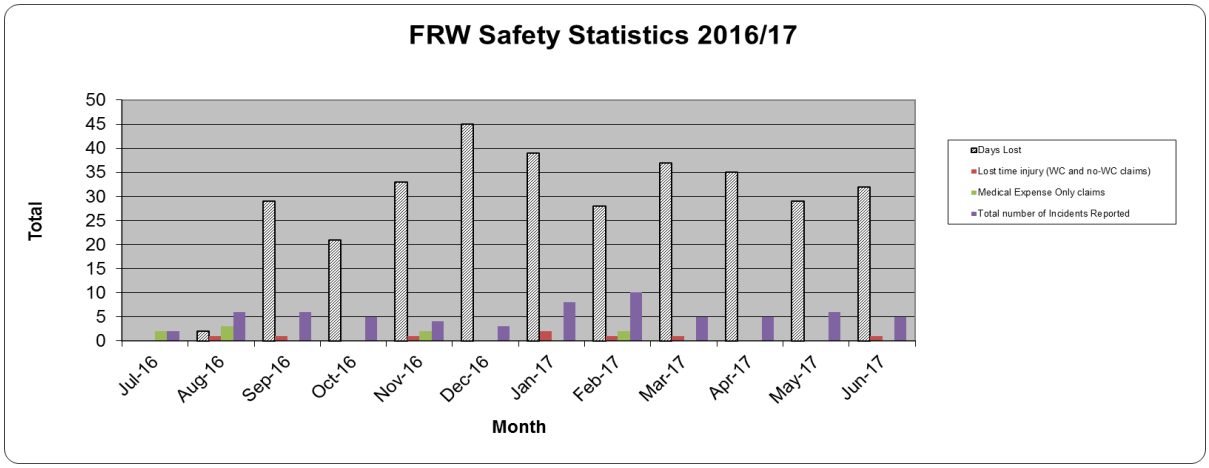
Business and Project Services

- No lost time injuries for the month
- No employees on long term lost time injuries
- One incident reported for the month.

A contractor was parked at the Athelstane Reservoir delivering hypo chlorite when his driveway protection safety device suddenly faulted and disengaged. This caused the truck to roll down towards the direction of the gate where he had entered. The hose still attached to the shed and the truck. The FRW Control Room operator received a phone call from the driver reporting the incident which caused damage to the fence.

4th quarter – 1 April 2017 to 30 June 2017

Lost Time Injury Statistics	4thd Quarter 2016/17	4th Quarter 2015/16	Total 2016/17 Year
Days Lost	32	0	330
Lost time Injury (Work Cover & non-Work Cover claims)	1	0	8
Medical Expense Only Claims	0	0	9
Total Number of Incidents Reported	5	7	65



Risk Management Summary

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Nil					

Legislative Compliance and Standards

All services were provided in accordance with the relevant standards as required by legislation and licence conditions for both water and sewerage activities.

3. ACHIEVEMENT OF CAPITAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

The following abbreviations have been used within the table below:

R	*Rockhampton*
G	*Gracemere*
M	*Mount Morgan*
WPS	*Water Pump Station*
SPS	*Sewage Pump Station*
STP	*Sewage Treatment Plant*
S	*Sewerage*
W	*Water*

Project	Start Date	Expected Completion Date	Completion Status	Budget Estimate	YTD actual/ committals
NETWORK OPERATIONS CAPITAL WORKS PROGRAM					
Rockhampton/Gracemere Water					
Yaamba Road Trunk Water Main Relocation Project 600mm water main replacement	February 2017	June 2018	15%	$7,655,007	$2,416,766
Comments: 600mm DICL main replacement project. Water main construction as part of Department of Transport and Main Roads RNAU Project. Stage 1 water main construction in progress. Orders raised for all materials associated with this project.					
Lion Creek Road (Morgan – Curtis) 150mm water main replacement	May 2017	July 2017	80%	$255,768	$164,161
Comments: 100mm AC main replacement project.					
Brae Street (Penlington – Davis) 100mm water main replacement	February 2017	June 2017	100%	$216,870	$238,339
Comments: 100mm AC main replacement project.					
William Street (Alma – Canning) 200mm water main replacement	March 2017	December 2017	5%	$772,914	$260,833
Comments: 200mm CI main replacement project.					
Mount Morgan Water					
Hall Street (East – Central) 100mm water main replacement.	May 2017	June 2017	100%	$70,732	$67,749

Project	Start Date	Expected Completion Date	Completion Status	Budget Estimate	YTD actual/ committals
Comments: 100mm AC main replacement project.					
Rockhampton/Gracemere Sewer					
West Rockhampton Sewage Catchment Diversion Project Jardine Park 300mm SRM construction	April 2017	October 2018	27%	$3,000,000	$783,205
Comments: Stage 1 construction in progress, detailed design works for Stage 2 progressing.					
Sewer rehabilitation program (including Building over Sewer)	July 2016	June 2017	100%	$700,000	$754,858
Comments: Rehabilitation and renewals annual program of works.					
Mount Morgan Sewer					
Railway Ave New 225mm Gravity Sewer Construction (Stages 2 & 3 incl. SPS)	July 2015	January 2018	73%	$4,200,000 (15/16 – 17/18) Including $1m BOR	$2,274,162
Comments: On Schedule. Significant increase in cost due to stabilised backfill requirements specified within TMR reserve. Scope of project increased to service additional properties. Stage 2 construction 100% complete with testing completed. Construction of Stage 3 section in progress, design work progressing on both the SPS and SRM designs.					
TREATMENT AND SUPPLY CAPITAL WORKS PROGRAM					
Pipeline from West to South STP – Design Phase	July 2014	June 2019	30%	$700,000	$500,000
Comments: Stage 1 construction work now underway at Jardine Park. Stage 2 design work currently underway.					
GSTP Augmentation	July 2016	June 2019	15%	$543,644	$212,681
Comments: Mechanical dewatering contract awarded to contractor with design work underway.					
M W Dam No 7 CCTV Installation	July 2014	July 2017	50%	$30,000	$12,000
Comments: Procurement of CCTV and communications equipment underway and an agreement signed with Qld Government for access to a communications tower.					
M WTP CCTV Installation	July 2014	July 2017	50%	$15,000	$5,000
Comments: Procurement of CCTV and communications equipment underway and an agreement signed with Qld Government for access to a communications tower.					
M W Dam No 7 Raw Lift	July 2016	July 2017	90%	$25,000	$6,500

Project	Start Date	Expected Completion Date	Completion Status	Budget Estimate	YTD actual/ committals
Pump Upgrade					
Comments: Work to be finalized after commissioning of the new UV Disinfection system at the WTP in mid-July.					
R GWTP Chemical Oxidation dosing system	September 2016	July 2017	60%	$350,000	$250,000
Comments: Project well underway with equipment delivered from Germany after some supply and delivery delays. Installation to commence in mid-July.					
M East St Ext. WPS Upgrade	December 2016	March 2017	100%	$30,000	$21,864
Comments: Complete					
R Frenchville Rd WPS control upgrade	December 2016	March 2017	100%	$30,000	$20,000
Comments: Complete.					
R – S NRSTP Aerator Replacement	July 2015	July 2017	90%	$50,000	$50,875
Comments: New aerator paddles installed on aerator No. 3 and further work to be completed on aerator No. 2 in May. Project delayed due to heavy rainfall and flood events. Work now to be completed in July.					
GWTP Highlift Pump Station Upgrade (Stage 1)	July 2013	May 2016	100%	$3,366,922	$3,208,854
Comments: Complete.					
GWTP Highlift Pump Station Upgrade (Stage 2)	August 2014	August 2016	100%	$3,510,000	$3,260,898
Comments: Practical Completion issued in late August. Dispute over application of Liquidated Damages currently being discussed.					
MMWTP Coagulant Dosing Upgrade	January 2016	July 2017	70%	$70,000	$49,968
Comments: Project delayed slightly by heavy rainfall events causing changes to the raw water quality. Work to recommence again during a period of lower consumption as part of externally contracted work.					
R – North Rockhampton SPS No. 1 and 2 electrical upgrade	July 2016	July 2017	90%	$929,000	$850,000
Comments: Project now in final stages of completion following some delays due to late delivery of the new pumps from Germany.					
R – NRSTP RAS pump renewal	July 2016	June 2017	100%	$25,000	$27,301
Comments: Complete					
R – SCADA Upgrade	July 2016	June 2017	80%	$250,000	$200,000

Project	Start Date	Expected Completion Date	Completion Status	Budget Estimate	YTD actual/ committals
Comments: Project work well underway with site installation works to commence in May. Some slight delays to project progress following the completion of a cyber security risk assessment workshop. Some further delays experienced to incorporate the findings of the risk assessment.					
M – WTP and STP UV Disinfection Installation	December 2016	July 2017	70%	$175,000	$80,000
Comments: Site installation works underway with completion expected in late July.					
R – WPS Thozet Rd Generator Installation	October 2016	August 2017	60%	$300,000	$112,099
Comments: Generator now being delivered to FRW following a slight delay. To commence in late May. Project delayed due to heavy rainfall and flood event. Installation to be completed as part of externally contracted works package currently tendered out.					
R – SRSTP Anoxic Mixers Renewal	December 2016	August 2017	60%	$40,000	$22,000
Comments: Project awarded to contractor with design work underway and equipment ordered. Awaiting delivery of equipment from overseas.					
R – SRSTP New Inlet Screen	December 2016	August 2017	40%	$80,000	$571
Comments: Project awarded to contractor with design work underway and equipment ordered. Delivery expected in mid-August.					
R, MM – Physical Security Upgrade (Fencing)	December 2016	February 2017	100%	$380,000	$405,000
Comments: Project completed.					

4. ACHIEVEMENT OF OPERATIONAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

As at period ended 30 June 2017.

Project	Revised Budget	Actual (incl. committals)	% budget expended	Explanation
Nil				

5. DELIVERY OF SERVICES AND ACTIVITIES IN ACCORDANCE WITH COUNCIL'S ADOPTED SERVICE LEVELS

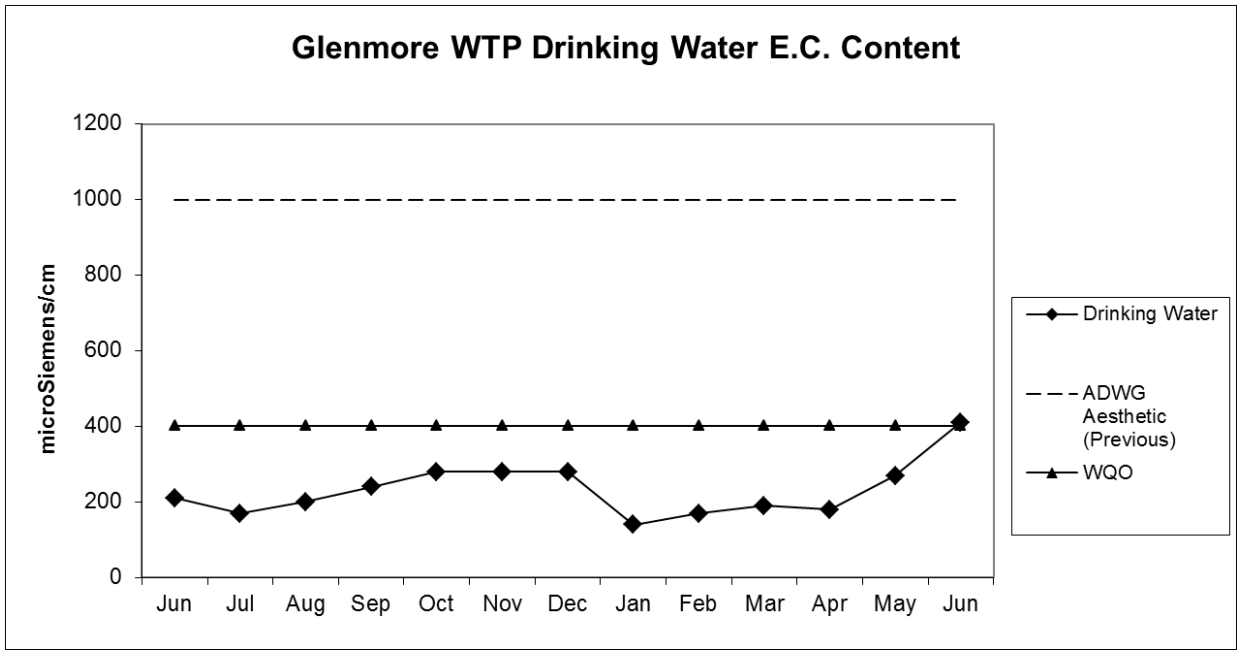
Service Delivery Standard	Target	Current Performance
Drinking Water Samples Compliant with ADWG	>99%	100%
Drinking water quality complaints	<5 per 1000 connections	0.16
Total water and sewerage complaints	N/A	224
Glenmore WTP drinking water E.C Content	<500 µS/cm	410 µS/cm
Glenmore WTP drinking water sodium content	<50 mg/L	36 mg/L
Average daily water consumption – Rockhampton	N/A	40.20 ML
Average daily water consumption – Gracemere	N/A	4.44 ML
Average daily water consumption – Mount Morgan	N/A	0.88 ML
Average daily bulk supply to LSC	N/A	7.45 ML
Drinking water quality incidents	0	0
Sewer odour complaints	<1 per 1000 connections	0.05
Total service leaks and breaks	80	77
Total water main breaks	15	10
Total sewerage main breaks and chokes	32	14
Total unplanned interruptions – water	N/A	50
Average response time for water incidents (burst and leaks)	N/A	148 min
Average response time for sewerage incidents (including main breaks and chokes)	N/A	62 min
Rockhampton regional sewer connection blockages	42	23

**Where there are no targets identified they will be set as part of the FRW Customer Service Standards.

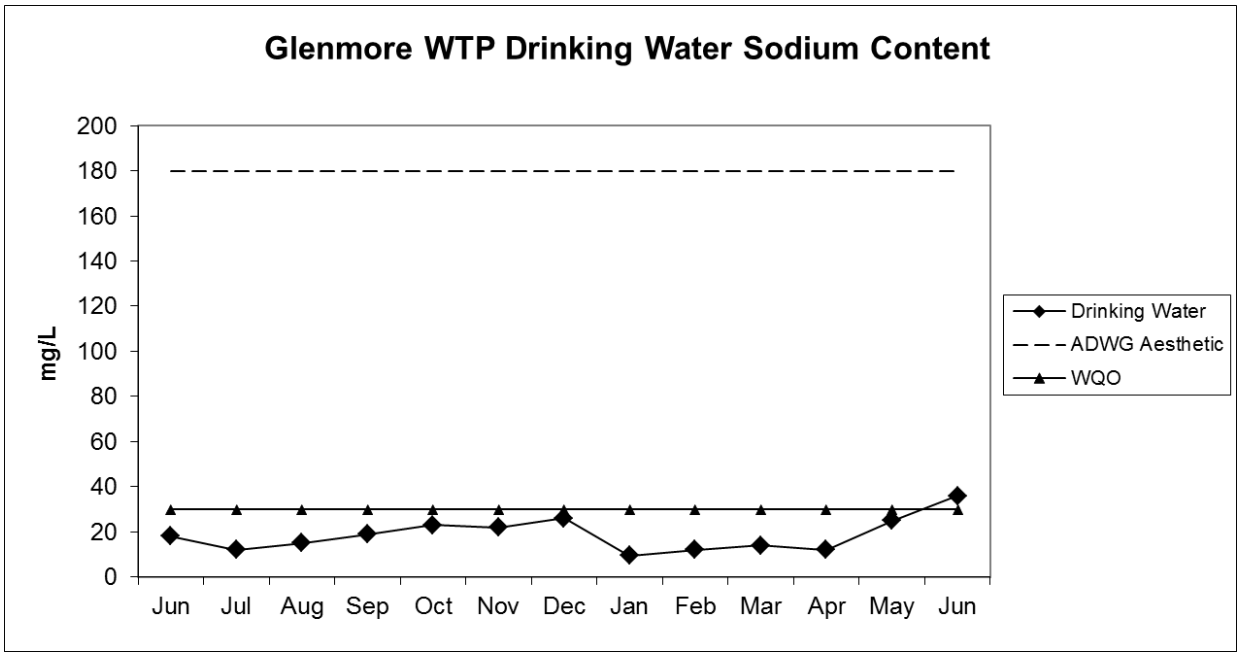
Refer to the individual graphs and information below.

TREATMENT AND SUPPLY

Drinking Water E.C. and Sodium Content



The level of E.C. in drinking water supplied from the Glenmore Water Treatment Plant (GWTP) during June increased to be 410 µS/cm. The level of E.C. is slightly above the Water Quality Objective of 400 µS/cm but well beneath the previously used aesthetic guideline value of 1000 µS/cm. The E.C. reading is expected to remain relatively unchanged for the next few months.



The concentration of sodium in drinking water supplied from the GWTP during June increased to be 36 mg/L. The current level of sodium is above the Water Quality Objective value of 30 mg/L but is well beneath the aesthetic guideline of 180 mg/L for sodium in the Australian Drinking Water Guidelines. The sodium concentration is expected to remain relatively unchanged for the next few months.

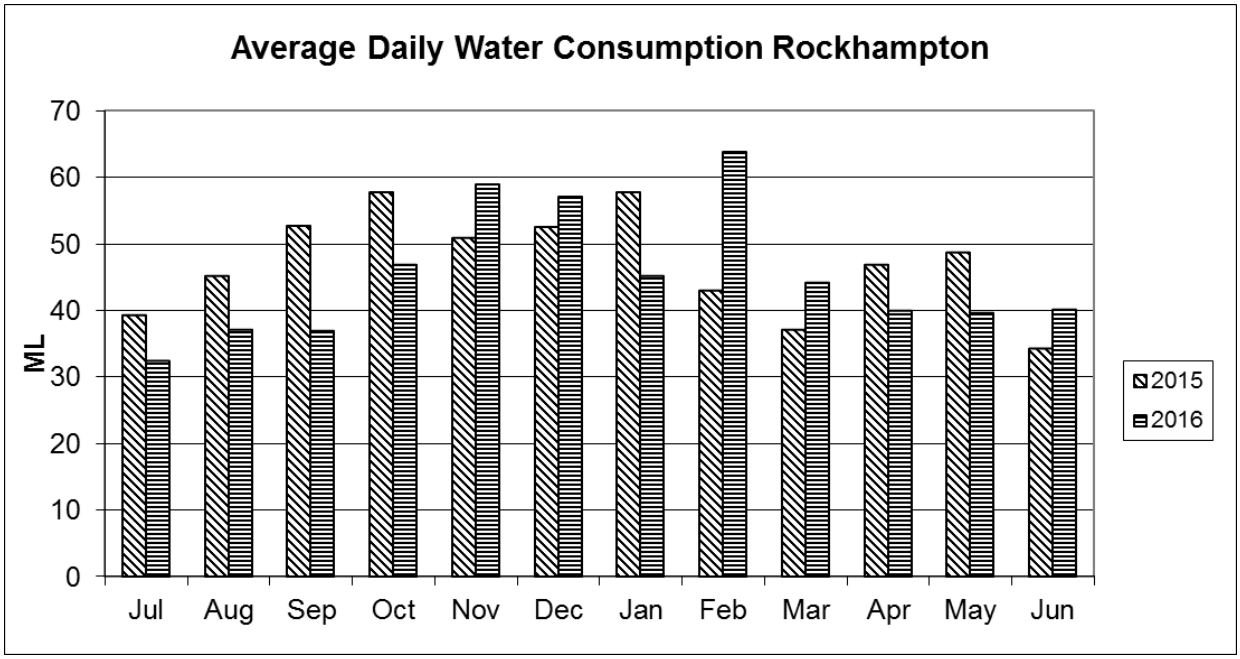
Drinking Water Quality as at 14 June 2017		
Parameter	Rockhampton	Mount Morgan
Total Dissolved Solids (mg/L)	230	180
Sodium (mg/L)	36	42
Electrical Conductivity (µS/cm)	410	290
Hardness (mg/L)	120	41
pH	7.59	7.20

The table above shows the results of drinking water testing in Rockhampton and Mount Morgan for selected water quality parameters.

Drinking Water Supplied

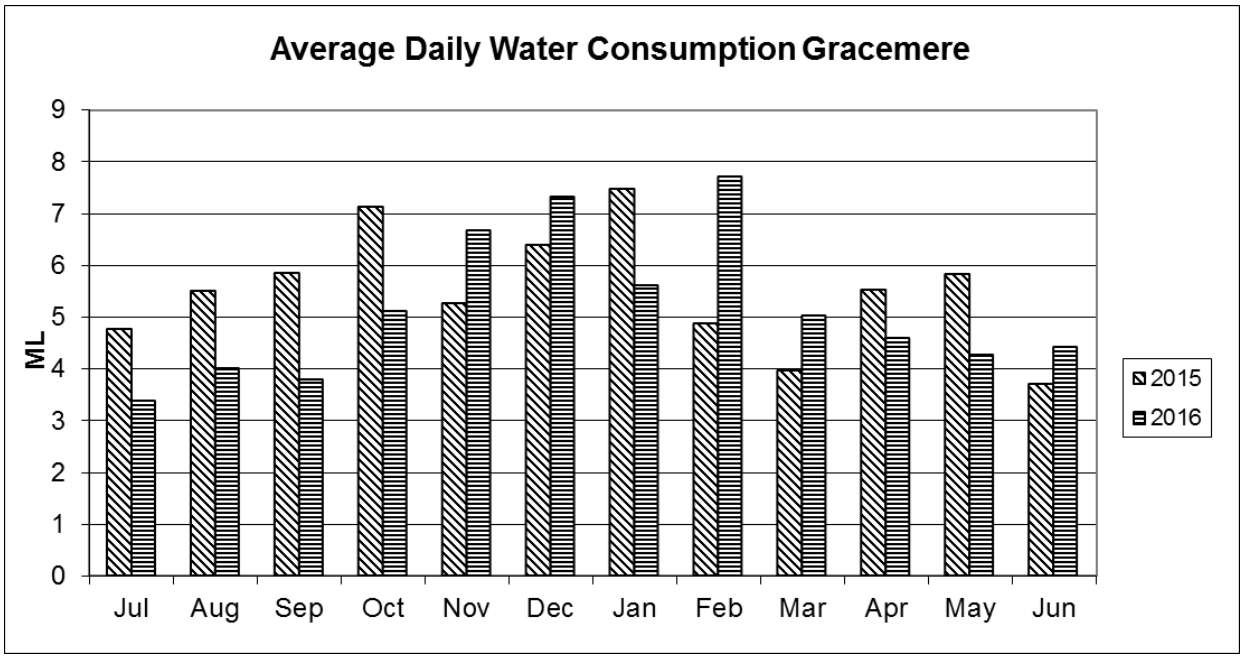
Data is presented in graphs for each water year (e.g. 2016 is the period from July 2016 to June 2017).

Rockhampton



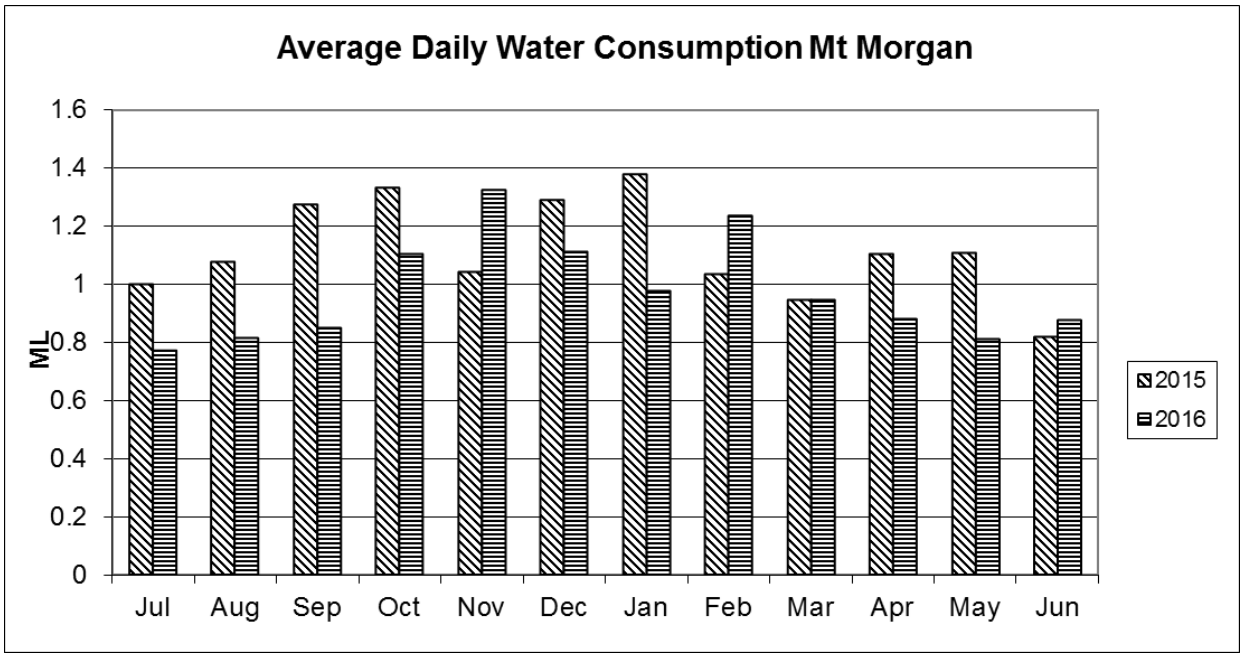
Average daily water consumption in Rockhampton during June (40.2 ML/d) increased slightly from that recorded in May and was greater than that reported in the same period last year. The higher consumption was due to the relatively low rainfall during the month. The Fitzroy Barrage Storage is currently at 100% of accessible storage volume and is therefore well above the threshold in the Drought Management Plan used to trigger the implementation of water restrictions.

Gracemere



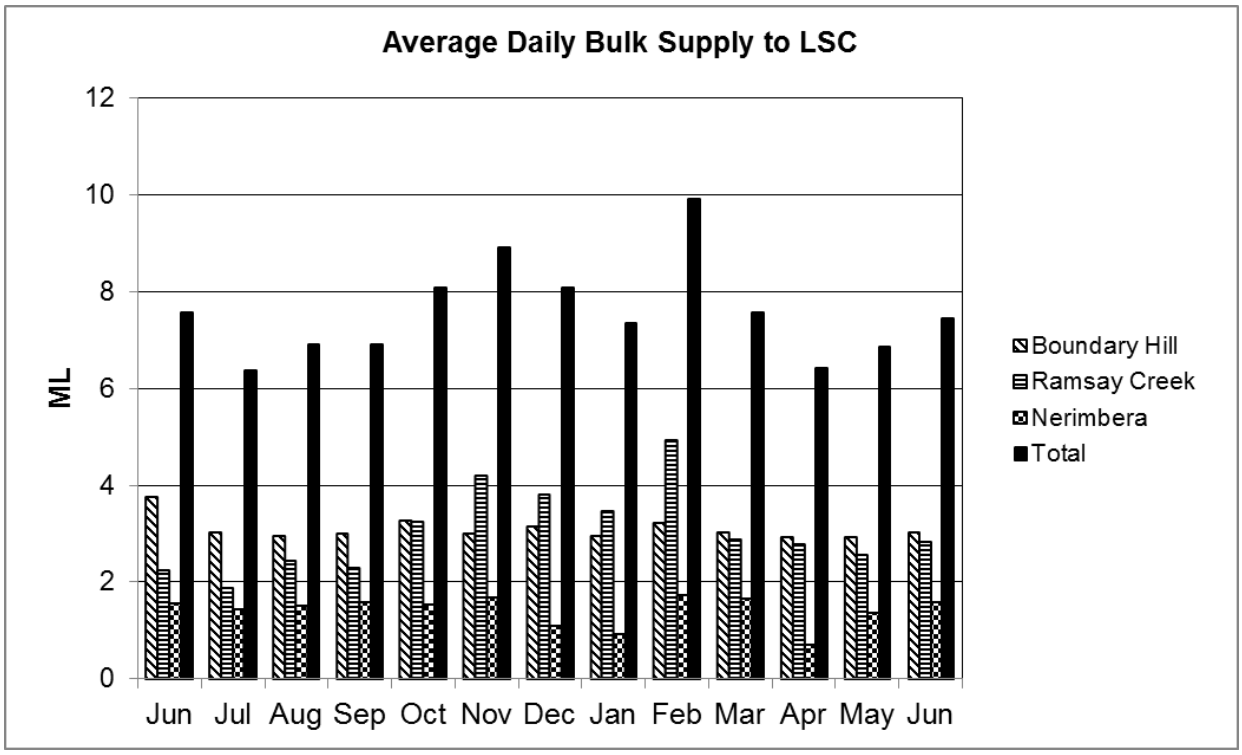
Average daily water consumption in Gracemere during June (4.44 ML/d) increased slightly compared to that recorded in May and was greater than that reported in the same period last year. The higher consumption was due to the relatively low rainfall during the month. The Fitzroy Barrage Storage is currently at 100% of accessible storage volume and is therefore well above the threshold in the Drought Management Plan used to trigger the implementation of water restrictions.

Mount Morgan



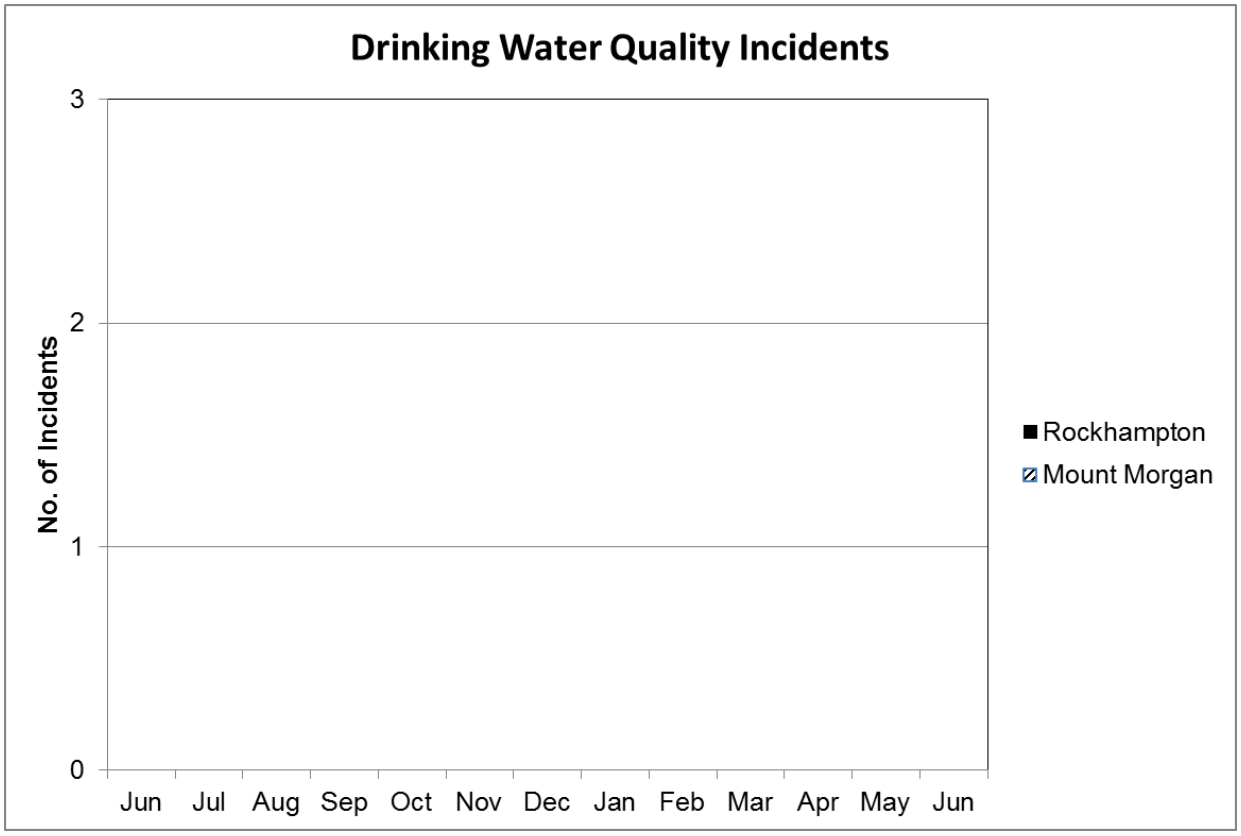
Average daily water consumption in Mount Morgan during June (0.88 ML/d) increased compared to that recorded in May and was greater than that reported for the same period last year. The higher consumption was due to the relatively low rainfall during the month. The No. 7 Dam is currently at 90% of the accessible storage volume and well above the 50% storage threshold value in the Drought Management Plan that is used to trigger the implementation of water restrictions in Mount Morgan.

Bulk Supply to Livingstone Shire Council



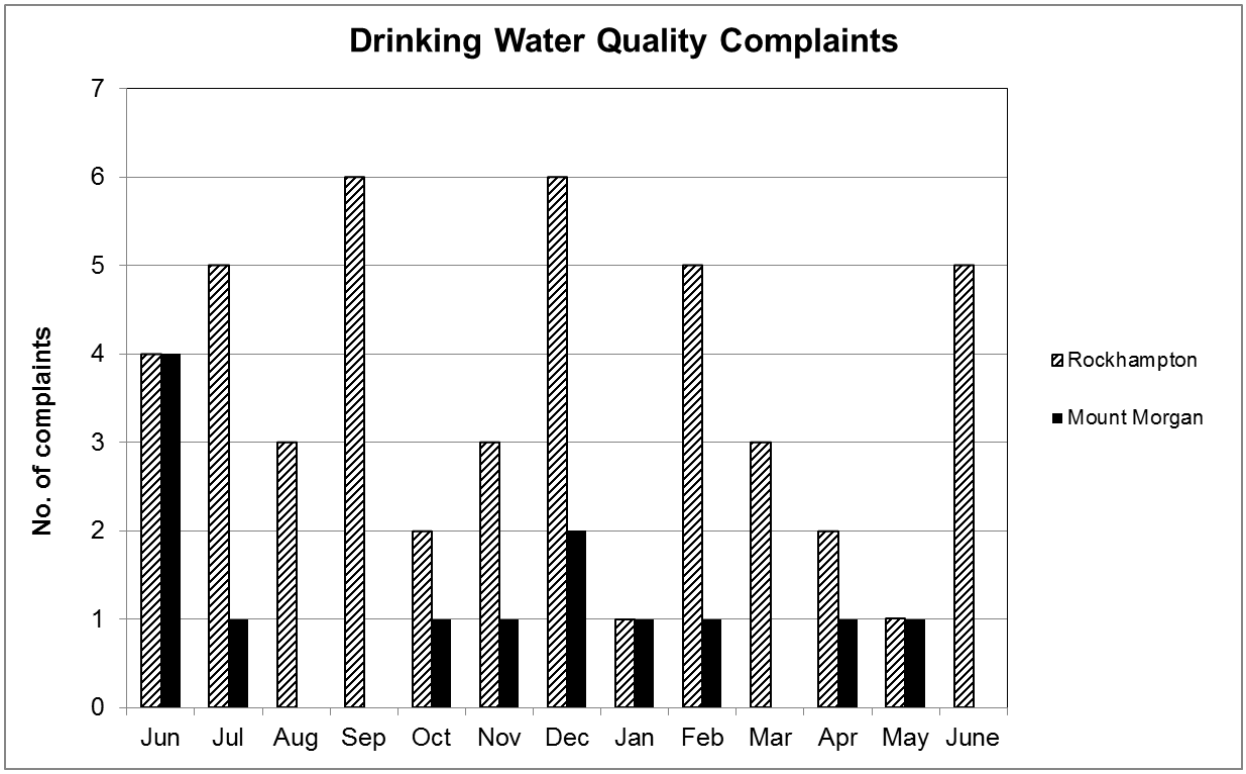
The average daily volume of water supplied to LSC during June increased compared to that recorded in May to be 7.45 ML/d. This volume is slightly lower than that recorded for the same period last year. The increase in bulk supply was due mainly to the relatively low rainfall during the month which contributed to the supply of greater volumes at each of the three sites.

Drinking Water Quality Incidents



No water quality incidents occurred during the month of June. Only one water quality incident has occurred in the last three years.

Drinking Water Quality Complaints

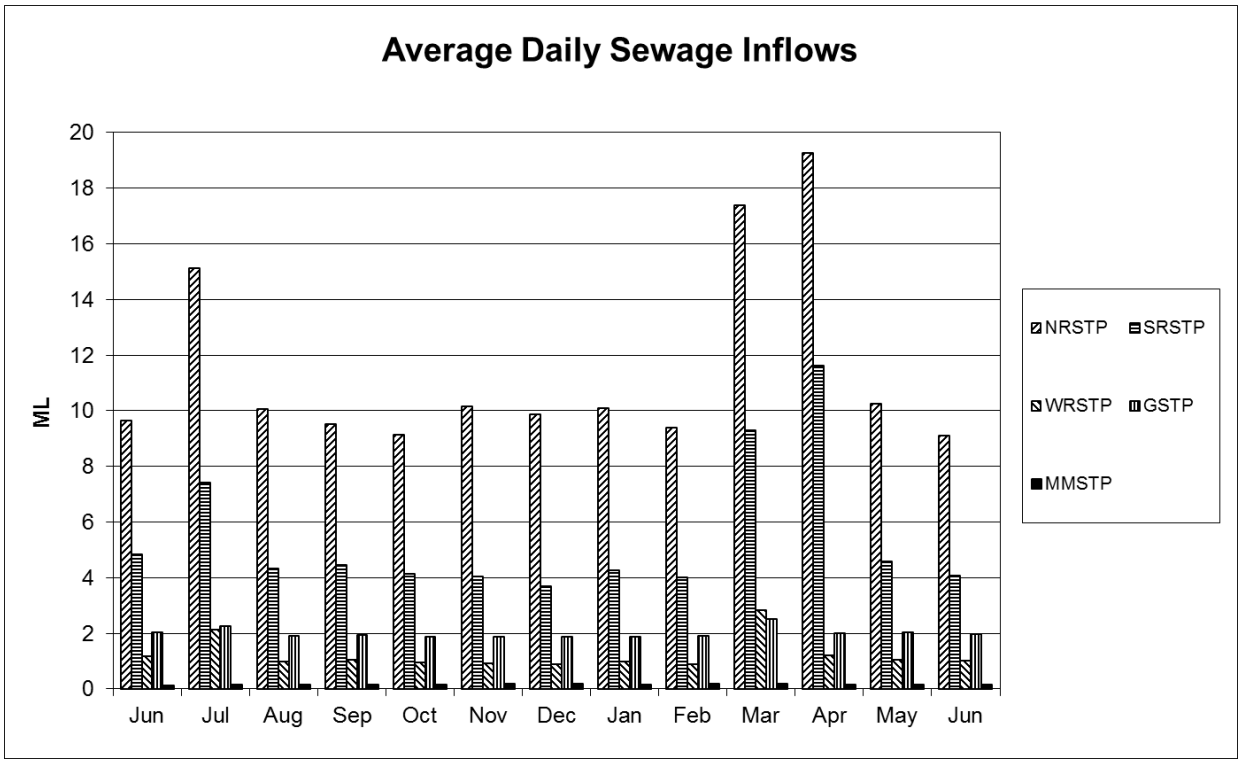


	Elevated Chlorine	Taste/Odour/Quality	Discoloured Water	Physical Appearance (e.g. residue or air)
No. Complaints	0	2	1	2

The total number of drinking water quality complaints (5 complaints) received during June was higher than the number of complaints received during May.

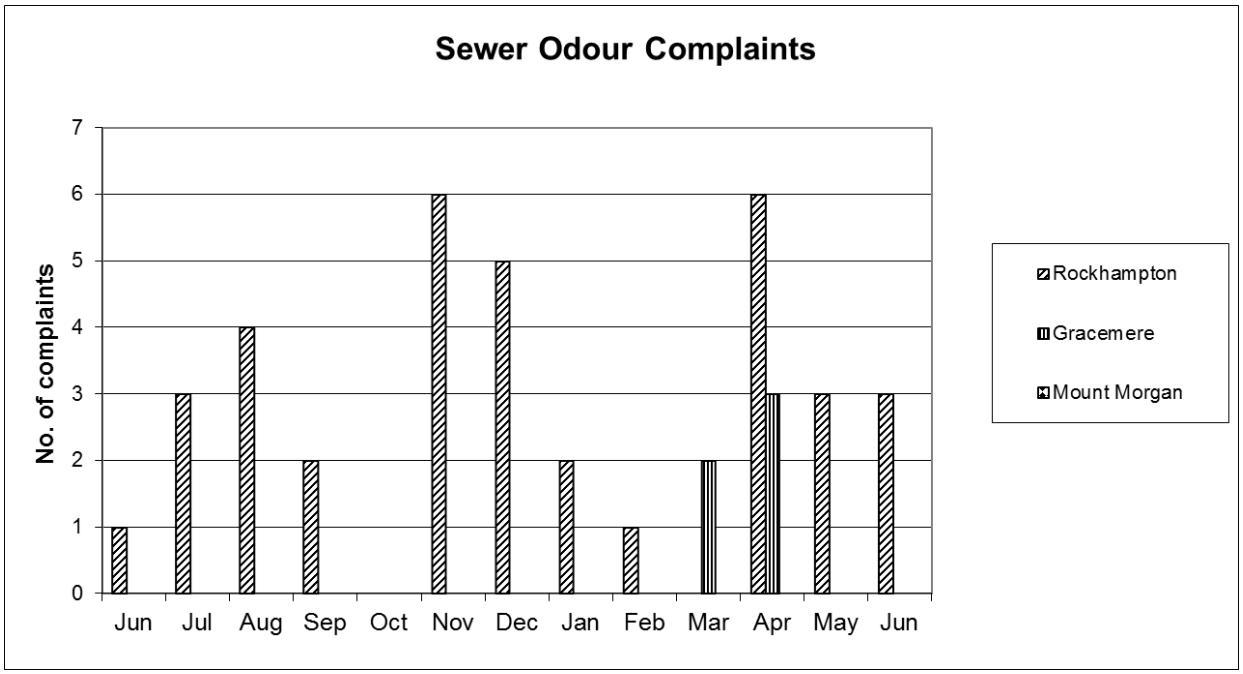
All of the complaints were received from customers in Rockhampton. Two of the complaints were associated with cloudy or milky water possible due to entrained air, two complaints were related to an unacceptable taste and a further complaint was due to discoloured water. In each instance, FRW responded and the complaints were resolved by flushing the water mains to clear or refresh the water provided to the customer, with water quality testing used as appropriate to confirm the return to normal high quality water.

Sewage Inflows to Treatment Plants



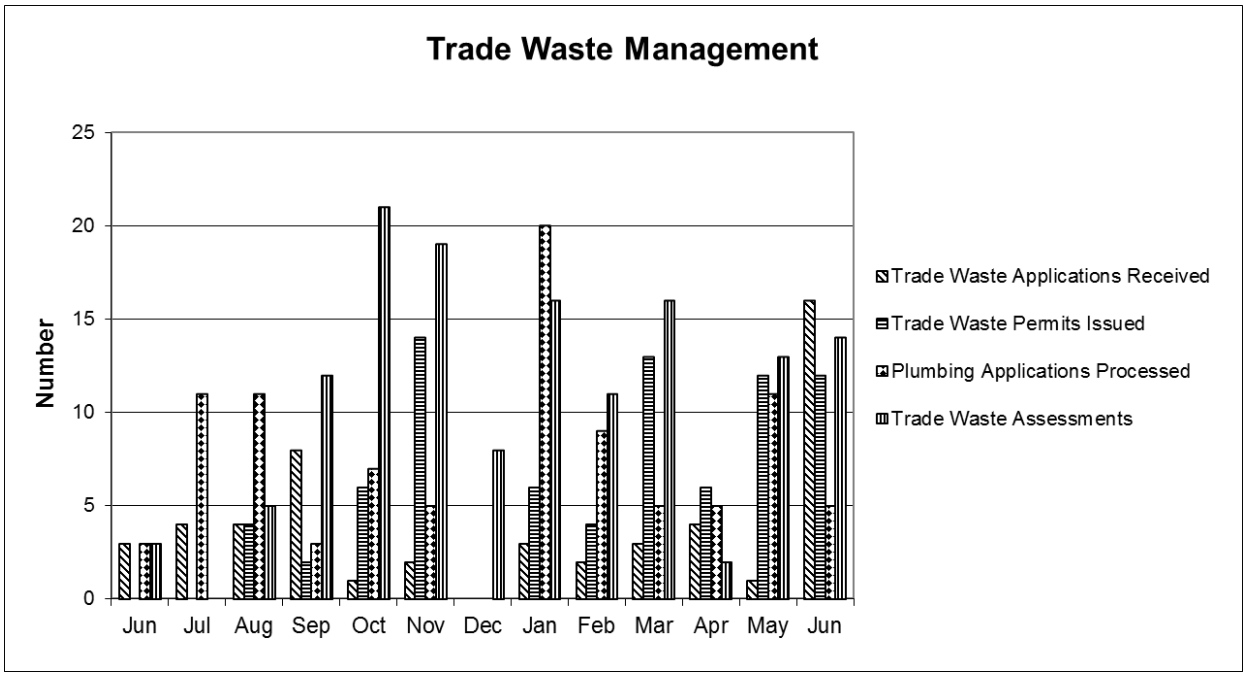
Average daily sewage inflows during June were lower than those recorded in May. The decrease in inflows was due to the relatively low rainfall during the month and therefore decrease in the amount of inflow or infiltration into the sewerage networks. These inflows are lower than that reported during the same period last year.

Sewer Odour Complaints



Three sewer odour complaints were received during the month of June. These complaints were associated with parts of the sewerage network. FRW crews investigated each complaint and took action where possible to address the source of the odour.

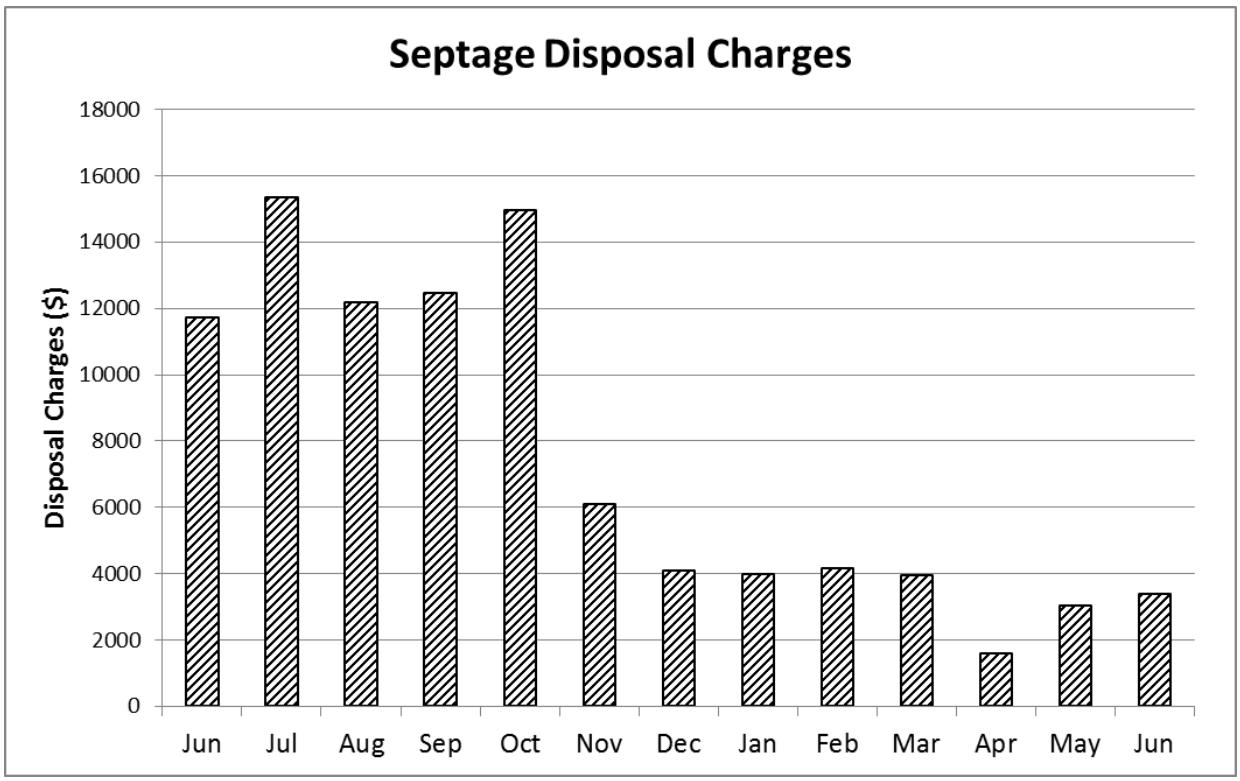
Trade Waste and Septage Management Activities



Sixteen Trade Waste applications were received and 12 Trade Waste permits were issued during the month of June. A total of five Plumbing Applications were processed and another 14 Trade Waste assessments or inspections were completed by the team.

The table below shows those permits which contained a significant change either to their Category rating or due to the inclusion of a Special Condition in order to comply with Council's Trade Waste Environmental Management Plan.

Industry/Trade	New or Renewal	Permit Category	Special Condition	Comments
Vehicle Washing	Renewal	1 to 2	N/A	1,877 kL/y discharge
Vehicle Washing	Renewal	1 to 2	N/A	1,522 kL/y discharge
Mechanical Workshop	Renewal	1 to 2	Bunding of oil/chemical storage areas	479 kL/y discharge
Mechanical Workshop with Washbay	Renewal	1 to 2	Bunding of oil/chemical storage areas	2,087 kL/y discharge

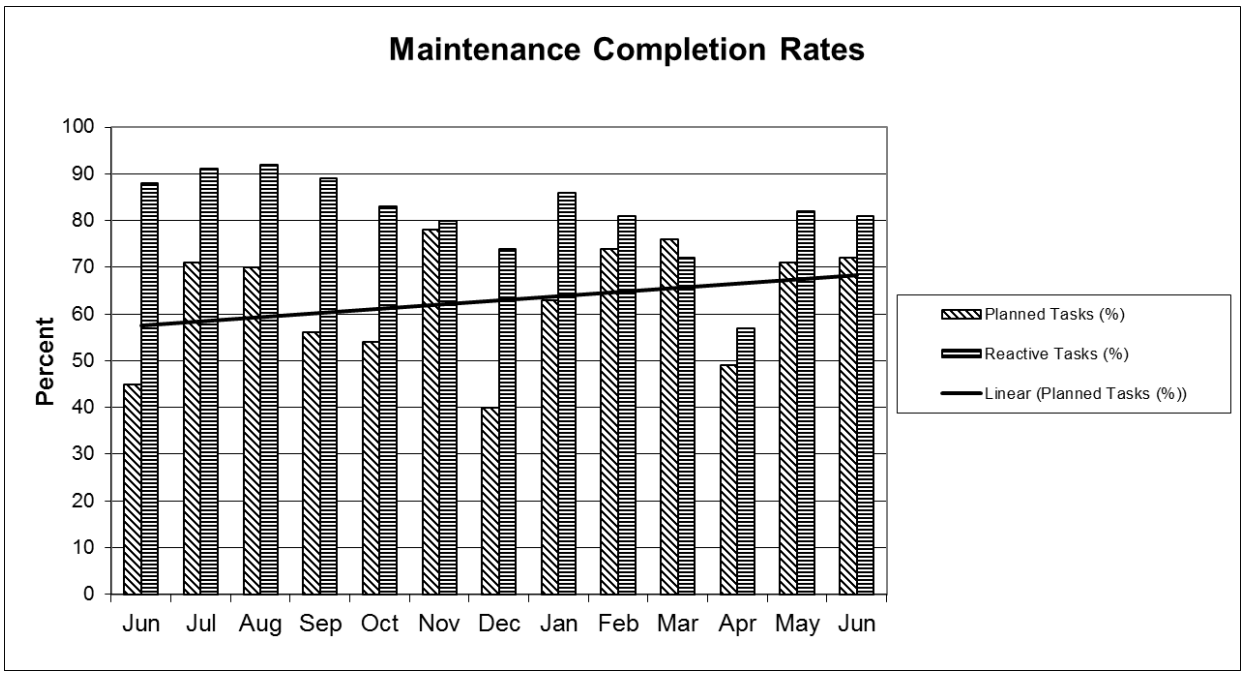


Charges for the disposal of septage liquid waste at the North Rockhampton STP remained relatively low compared to the majority of 2016. The decrease probably reflects the slight downturn in industrial works and the disposal of these wastes at other locations.

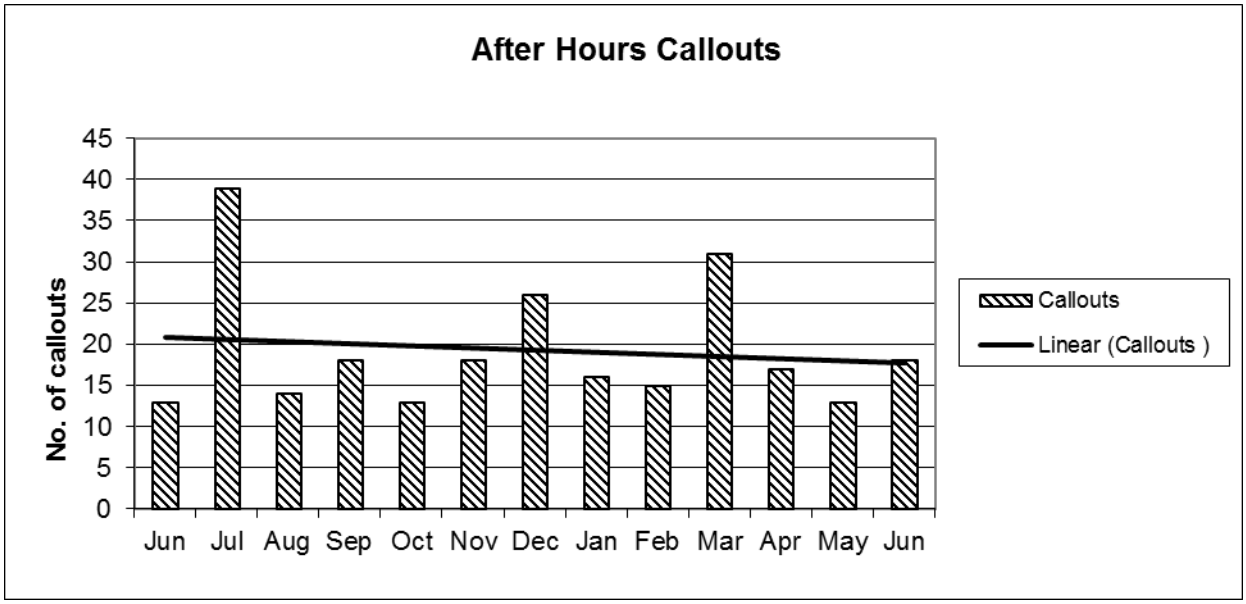
Treatment and Supply Maintenance Activities

The table below shows the breakdown of work completed based on the category of the work activity.

Maintenance Type	Work Category			
	Electrical	Mechanical	General	Operator
Planned	89	70	61	n/a
Reactive	47	27	0	0
After hours callouts	14	3	0	0
Capital	4	1	3	n/a
Safety and Compliance	9	23	0	0



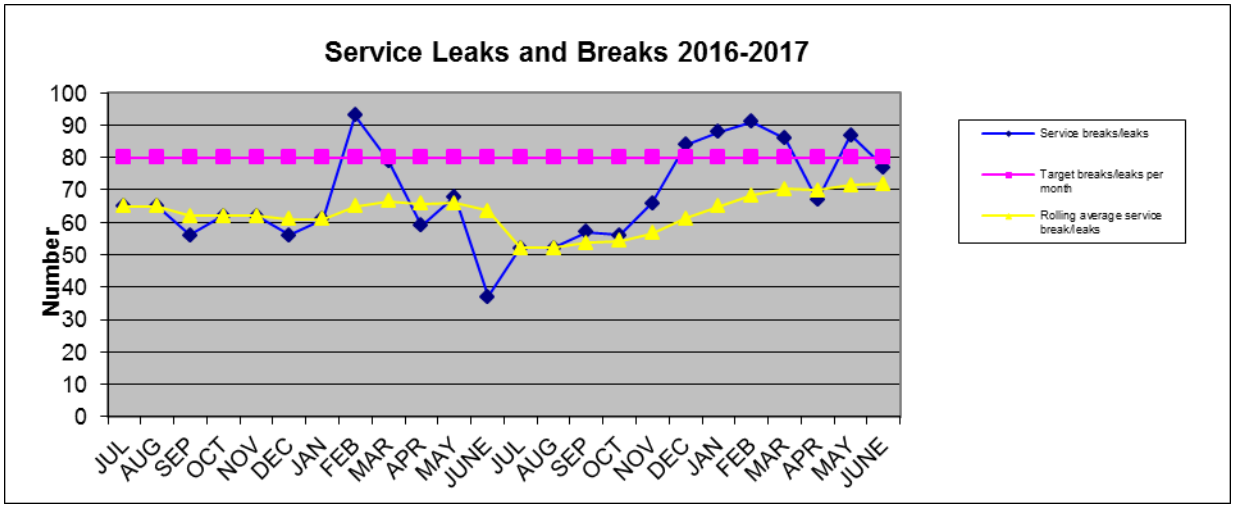
A total of 307 preventative maintenance activities were scheduled and 125 reactive maintenance activities were requested during the month of June. Completion rates for each type of maintenance activity by the end of the month were 72% and 71% respectively. The long term trend line shows continued improvement in the completion rate for planned maintenance tasks.



The number of after-hours callouts for electrical and mechanical reactive maintenance (17 call-outs) increased during June compared to May. The number of callouts was less than the 12 month rolling average of 20 call-outs per month. The long term trend line in the graph indicates an overall decrease in callouts, with the highest numbers of callouts typically associated with months where heavy rainfall events occurred. In the majority of cases, the faults were rectified within the targeted rectification time according to the Priority Ratings used to rank reactive maintenance events.

NETWORK

Regional Service Leaks and Breaks



Performance

Target met with a reduction in service breaks from previous month, large number of class 12 poly service failures continues to be an issue, continued failures of threaded poly sections installed during water meter installations. A $200,000 capital water service replacement program to be implemented during future financial years based on service failure data.

Issues and Status

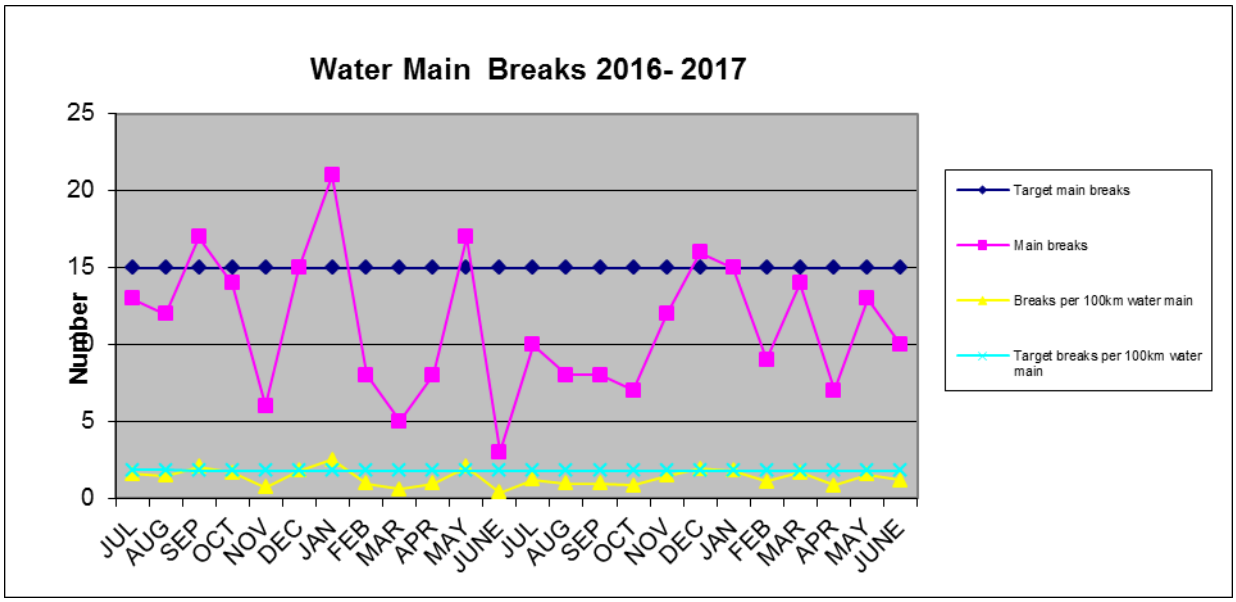
Maintenance records indicate a high percentage of service breaks and joint failures consistently occurring on poly services.

Response to Issues

Water services subject to two failures are being replaced under the capital replacement program to minimise the risk of continued failures.

Locality	Service Leaks / Breaks
Rockhampton	76
Mount Morgan	1
Regional Total	**77**

Regional Water Main Breaks



Performance

Target achieved, decrease in water main breaks in Rockhampton when compared to previous months. Overall trending decrease in water main failures as a result of the implementation of a strategic Capital Water Main Replacement Program continues.

Issues and Status

The following table shows the number of breaks per month.

Water Main Type	April 2017	May 2017	June 2017
Cast Iron	0	3	2
AC	2	4	5
PVC	5	3	3
GWI	0	0	0
Mild Steel	0	0	0
Poly	0	3	0
TOTAL	**7**	**13**	**10**

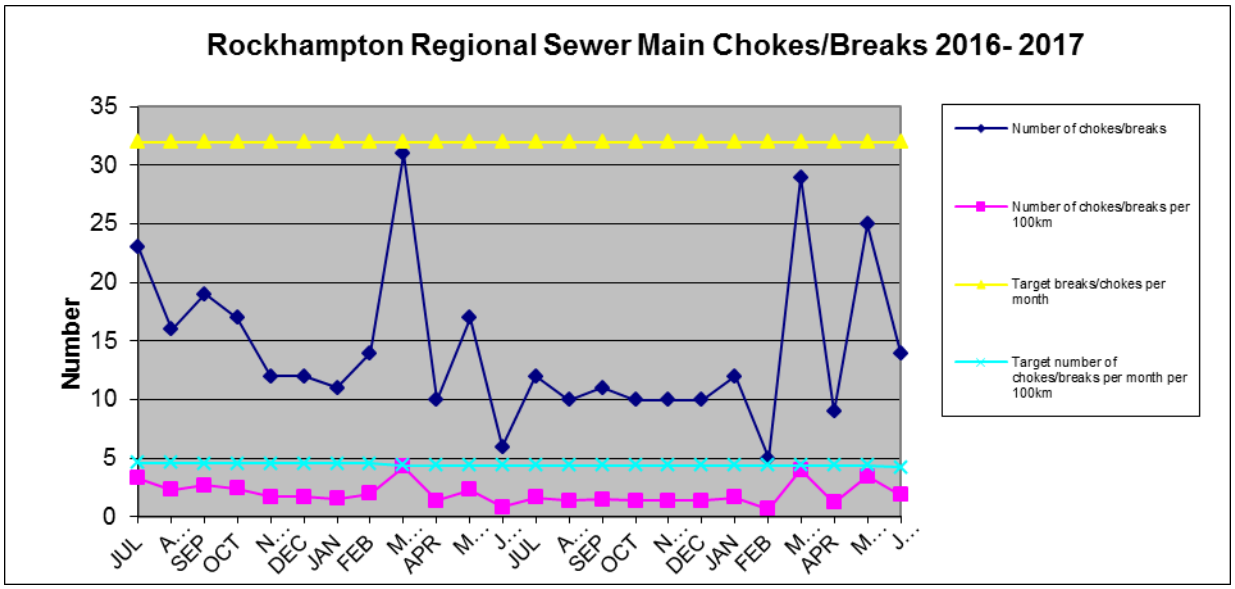
Response to Issues

Continued defect logging and pressure management will reduce failure occurrences. Water mains experiencing repeated failures are assessed for inclusion in annual Water Main Replacement capital program.

	Number of Main Breaks	Target Main Breaks	Breaks per 100 km	Target Breaks per 100 km	Rolling average per 100 km
June	10	**15**	1.19	**1.80**	1.30

Locality	Main Breaks
Rockhampton	8
Mount Morgan	2
Regional Total	**10**

Rockhampton Regional Sewer Main Chokes/Breaks



Performance

Target achieved, apart from some issues during recent extreme weather events, it's evident that mainline sewer blockages are continuing to trend down in line with capital sewer refurbishment programs.

Issues and Status

Data indicates that a high percentage of blockages / overflows continue to be caused by defective pipes resulting in tree root intrusion.

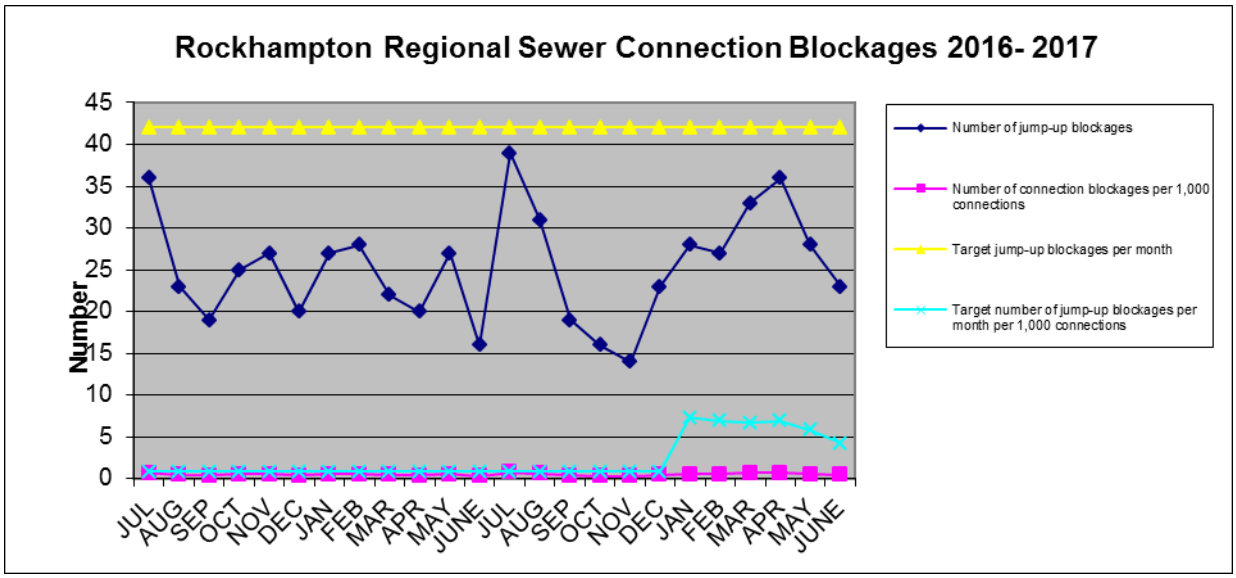
Response to Issues

Continue to log defects and monitor outcomes to ensure inclusion in the Capital Sewer Main Relining and rehabilitation programs.

	Number of chokes/ breaks	Target chokes/breaks per month	Number of chokes/ breaks per 100 km	Target number of chokes / breaks per month per 100km	Rolling 12 month average per 100 km chokes / breaks
June	14	**32**	1.9	**4.41**	1.74

Locality	Surcharges	Mainline Blockages
Rockhampton	4	14
Mount Morgan	0	0
Regional Total	**4**	**14**

Rockhampton Regional Sewer Connection Blockages



Performance

Target achieved with a noticeable decrease in blockages when compared to previous months. It's evident that sewer connection blockages are continuing to trend down in line with capital sewer refurbishment programs. Sewer connections are prioritised for inclusion in these capital refurbishment programs in line with failure information.

Issues and Status

Data indicates blockages are been caused by broken pipes due to age, along with the resulting tree root intrusion.

Response to Issues

Continue to assess properties with repeat breaks and chokes for inclusion in the capital sewer refurbishment programs.

	Number of connection blockages	Target connection blockages per month	Number of connection blockages per 1,000 connections	Target number of connection blockages per 1,000 connections	Rolling 12 month average per 1,000 connections
June	23	**42**	0.45	**0.83**	0.52

Locality	Connection Blockages
Rockhampton	23
Mount Morgan	0
Regional Total	**23**

Sewer Rehabilitation Program

	Number completed for June	FY to date totals
Access Chambers raised	11	**77**
Sewers repaired	12	**178**

Private Works

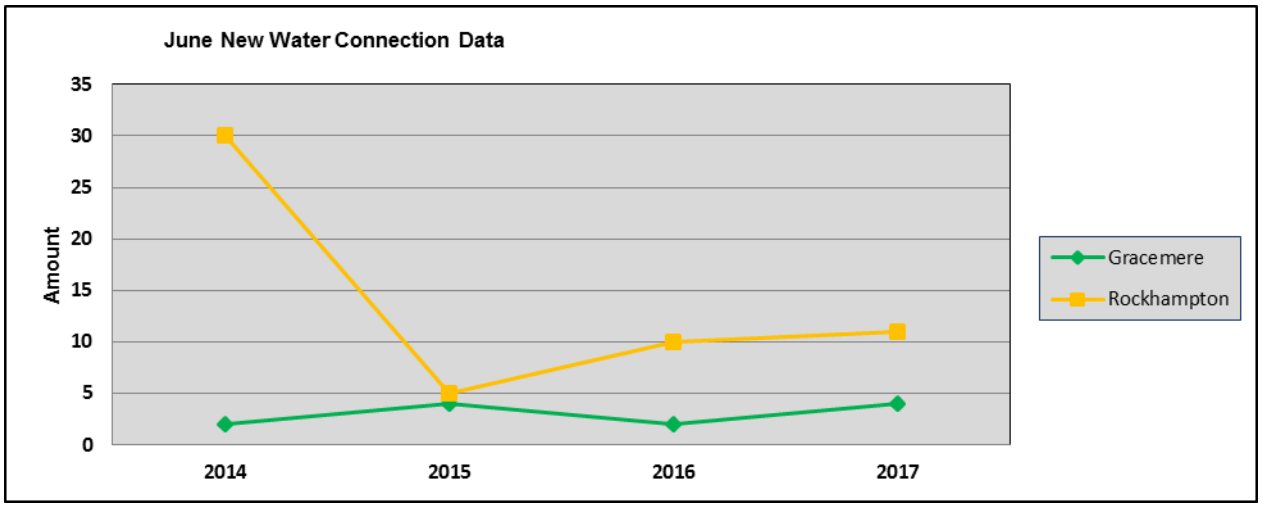
New Water Connections

Region	June 2017	FY to Date 2016	FY to Date 2015	FY to Date 2014	FY to Date 2013
Gracemere	4	68	55	59	76
Rockhampton	11	107	134	171	294
Mount Morgan	n/a	n/a	n/a	n/a	n/a
Regional Total	**15**	**175**	**189**	**230**	**370**

This table and graph shows the water connection data, for June, for the past four years.

Region	June 2017	June 2016	June 2015	June 2014
Gracemere	4	2	4	2
Rockhampton	11	10	5	30
Mount Morgan	n/a	n/a	n/a	n/a
Total	**15**	**12**	**9**	**32**

New Connection Data



Details on Private Works Jobs

The table below shows the quantity of private works jobs quoted and accepted during the reporting period and year to date. Jobs include both water and sewerage.

	June	Amount	FYTD	FYTD Amount
Quotes Prepared	5	$23,090.12	122	$586,581.94
Quotes Accepted	6	$35,910.62	90	$445,034.06
Jobs Completed	5	$27,116.36	77	$314,812.71

Water Meters

Meter reads for the 4th quarter were finalised on 12 June 2017 and 5,600 meters were read during the month. Approximately 10,300 water accounts were issued during the month.

Sectors Read for June	17	18	Total
No. of meters in Sector	4128	1472	5600
No-Reads	15	4	19
% Of No-Reads	0.4%	0.3%	0.35%

Special Water Meter Reads

Reading Type	No. of Reads	$ Value
Water Account Search - Averaged Readings $29 per read	69	$2,070
Water Account Search - On-Site Readings $152 per read	23	$3,565
Total $ Value for June		$5,635
Total $ Value Financial Year to Date		$68,685

Building Over Sewers

The following summary is an overview of this core business activity that requires ongoing negotiations with the respective stakeholders and detailed investigations to determine location and condition assessments of the associated infrastructure.

Activity Summary

	June	FYTD
General enquiries	11	156
Site investigations	37	214
Approval Permits issued	2	24
Permits closed	2	13
Total	**52**	**407**

Building Over Sewer Applications under Assessment

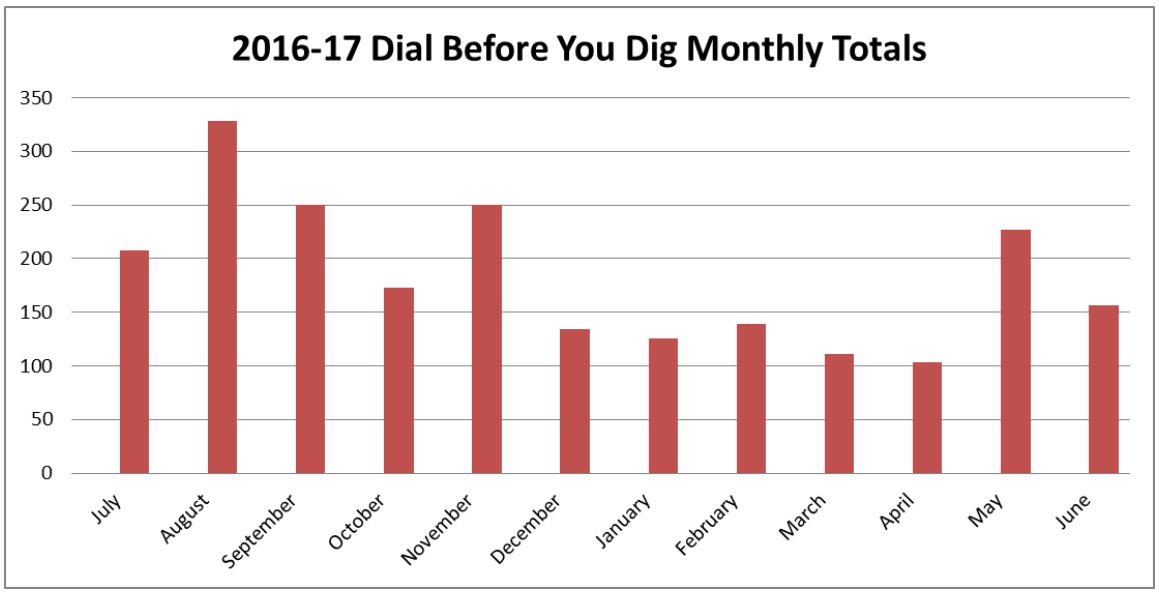
There are three permits currently under assessment as at 30 June 2017.

ADMINISTRATION

Dial Before You Dig (DBYD)

The average number of requests received per day for June was 5.23, a slight decrease from 7.32 received in May.

	April 2017	May 2017	June 2017	FY Total
Requests Processed	103	227	157	1,836



Site Tours

There was one site tour of the Glenmore Water Treatment Plant (GWTP) in June being a group of 18 students and three staff members from Emmaus College on 6 June 2017.

Customer Service Performance

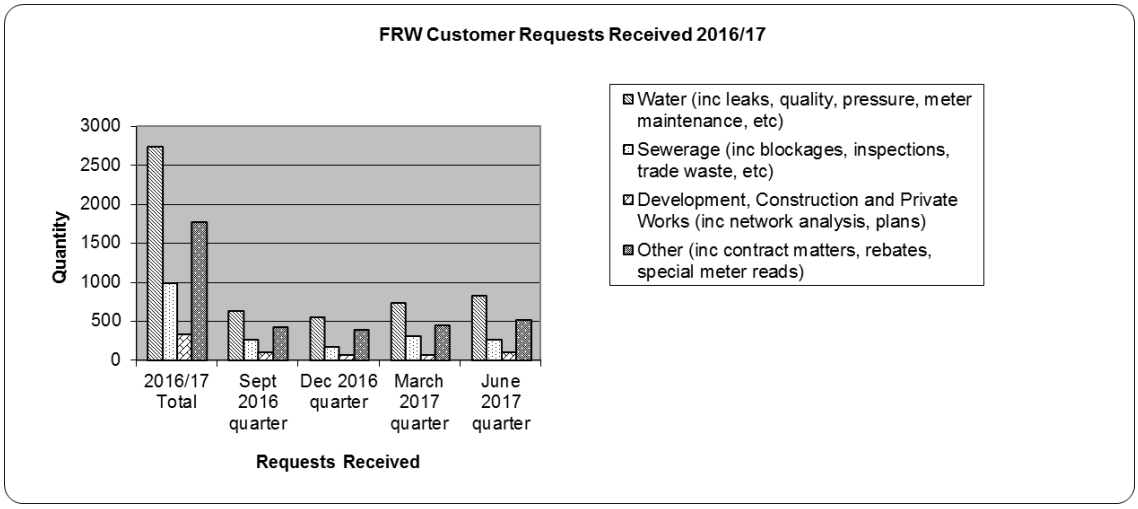
FRW has an internal service level agreement with Finance and Business for the provision of customer service related functions including:

1. Face to Face Customer Support.
2. 24 Hour Telephone Contact Service.
3. Acceptance of Payment.

The following table summarises customer contacts made via the telephone and face to face at the Council Customer Service Centres. These customer contacts are then addressed by FRW.

Customer Contact - 4th quarter – 1 April 2017 to 30 June 2017

Customer Contact Type	4th Quarter 2016/17	4th Quarter 2015/16	Total 2016/17 Year	Total 2015/16 Year	Total 2014/15 Year
Water (incl. leaks, quality, pressure, water meter maintenance, etc)	826	611	2738	2574	3358
Sewerage (incl. blockages, trade waste etc)	259	170	990	866	845
Development, Construction and Private Works	96	82	327	390	445
Other (incl. contract matters, rebate, special meter reads, etc)	515	458	1772	1810	1941
Total Customer Contacts	**1696**	**1321**	**5827**	**5640**	**6589**



Undetected Leaks (Residential)

	June	FYTD
New requests	16	131
Number declined	1	20
Number approved	5	87
Require more info	8	35
Total KL rebated	849	32,643
Total value approved	$1,821.59	$59,744.08

Undetected Leaks (Commercial)

	June	FYTD
New requests	2	12
Number declined	1	2
Number approved	1	10
Require more info	0	0
Total KL rebated	378	18,295
Total value approved	$161.60	$7,644.58

Residential Rebates

	June	Total FYTD Applications	Total FYTD $
Washing machines	14	175	$17,500
Stand alone tank	0	1	$250
Integrated tank	0	1	$500
Dual flush toilet	0	4	$200
Shower rose	0	2	$50
Total	**14**	**183**	**$18,500**

One applicant has been requested to provide additional information as they are not enrolled on the AEC at the installation address.

Communication and Education

Media Releases

On 7 June 2017 Council's Media & Engagement team held a media opportunity regarding the continuation of the successful FRW stormwater inflow inspection program. The focus of the program and highlighted in the release was that FRW would be conducting stormwater inflow inspections to reduce the impact of severe weather events and flooding on local sewerage networks at a number of selected and notified properties. The media release was distributed and published on Council's website. The media op and release received coverage on Win TV, Channel 7 and The Morning Bulletin.

On 19 June 2017 Council's Media & Engagement team issued a Notice of approved inspection Program in response to the official Council endorsement of the program.

Barrage Open Day releases prepared and scheduled for July.

Social Media

On 7th June Council's Media & Engagement team posted photo and information about the FRW stormwater inflow inspection program with photo and link to media release.

Barrage Open Day

Preparation continued for the 2017 Barrage Open Day event. The event aims to promote, the Fitzroy River, the role of the Barrage and Fitzroy River Water in providing the community with quality and reliable water sources, and raising awareness in the community to make changes to our day-to-day lives to protect this essential resource.

INFRASTRUCTURE PLANNING

Sewer Network Investigations

Airport sewer Capacity Investigation

Planning report has been signed off and received by the Airport team.

PFTI Review

Documentation of Rising Main summary table and catchment mapping is being finalised.

Inflow / Infiltration

The analysis of non-compliance reports from the house to house inspection program carried out in South Rockhampton suggest there are still major sources of infiltration to be identified. Potential sources identified for further investigation include hospitals, aged care homes and schools where the potential for cross connections between complex sewer and stormwater drainage networks is highest. Access chambers downstream from these institutions have been identified for visual inspection during future rain events prior to conducting detailed internal drainage inspections.

A program for house to house inspections in North Rockhampton has been prepared and will target known inflow hots spots highlighted from previous sewer flow logging results.

Sewer Area Maps

Maps have been updated and provided to Strategic Planning in the form of pdf documents as referenced in the revised Planning Scheme.

There has been no further development on the final maps being compiled for access via the Council website.

North Rockhampton Flood Mitigation Investigation (NRFM)

No further development.

Mt Morgan Sewerage Strategy

No further development.

Parkhurst Sewerage Pump Station Implementation Strategy

No further development.

Gracemere – Fisher Street Sewerage Pump Station

No further development

Gracemere – Proposed Dog Pound Sewerage Pump Station

No further development

Water Network Investigations

Network Performance Maps

A request was received from Queensland Fire and Emergency Services (QFES) for hydrant flow test results and water main sizes to assist the Operational Crews identify areas of low flow and provide Building Approval Officers with an idea of potential problem areas for developers.

Maps were prepared showing the varying range of service pressure and potential hydrant flow that is available throughout the network. It was noted that the maps were prepared as a guide and were derived from network models. It is the intention for these maps to evolve through further validation from actual flow tests results provided by both Council and QFES.

PFTI Review

No further development.

Parkhurst 600mm Trunk Main Replacement Analysis

An alternative alignment via Yeppoon Road, Norman Road and Olive Street was analysed and found to have a neutral impact on the ultimate performance of the network.

To reduced conflict with future Olive Street intersection upgrades, Jones Street was identified for further consideration as an alternative to corridor for connecting Norman Road and Yaamba Road.

Water Area Maps

Maps have been updated and provided to Strategic Planning in the form of pdf documents as referenced in the revised Planning Scheme.

There has been no further development on the final maps being compiled for access via the Council website.

Mt Morgan – Future Water Supply

No further development.

Water Meter – Thematic Mapping of Consumption

No further development

System Leakage Management Plan

No further development

Water Loss Calculations

The following water loss results were reported in the December customer service standards quarterly report.

Water Supply Scheme	Water loss per Connection (Litre per day)			
	September	December	March	June
Rockhampton	101	135	82	**147**
Mount Morgan	94	101	107	**107**

FINANCIAL MATTERS

Operational

The operational report does not contain all final end of month entries or end of financial year entries such as revenue and expenditure accruals, interest allocations and final depreciation and overhead allocations.

Revenue is currently 98.6% of the 2016/2017 March revised budget. Some revenue streams are below target and some above target. After final accruals are processed, FRW will meet its revenue target.

Gross water consumption revenue is 94.7% of March revised budget. Fourth quarter consumption for Gracemere, Mt Morgan and three sectors of Rockhampton will be accrued back to the 2016/2017 year. This will see FRW achieve the water consumption revenue target. Gross water and sewerage access charges are marginally below target, due to lower than anticipated water access charges in Gracemere. Bulk water sales are on target. Private Works is below target at 67.9% and is in line with the downward trend for the number of private works job from one to two years ago. Fees and charges are slightly below target at 98.7%, attributed to lower new water connection charges, metered standpipe charges and lower bulk liquid waste charges. Interest revenue is on target. Other income is well below target due to a credit note being raised in this financial year and the income in a prior financial year.

Expenditure year to date is 98.3% of the 2016/2017 March revised budget. Most expenditure streams are on target. After final expenditure accruals are processed, FRW will achieve 100% of its expenditure budget. There are no known anomalies that would see FRW grossly exceed it expenditure budget.

Overall, FRW should achieve a budgeted surplus of $4.1M.

No other material exceptions to be reported.

Capital

The capital report does not contain all final end of month entries or end of financial year entries such as accruals and final overhead allocations.

Capital expenditure is below the percentage of year elapsed at 88.9% in comparison to the March revised budget. Expenditure during June has decreased compared to May by $870k. This is attributed to a decrease in activity in Yaamba Rd 600mm water main replacement.

Water YTD 87.6% and Sewer YTD 90.7%.

Networks YTD 112.2% and Treatment YTD 63.5%.

The areas of prominent activity are the North Rockhampton SPS No 1 & 2 switchboard upgrades, Gracemere STP mechanical dewatering, Yaamba Rd 600mm water main replacement, UV disinfection at MMSTP and WTP, Sewer pipeline from WRSTP to SRSTP, Sewer main refurbishment and Water Main Replacement programs.

There are no material exceptions to report.

Sundry Debtors

Below is a summary of aged sundry debtor balances at the end of June 2017. The 90+ day balances are either on payment plans, the business is in administration or the debt is with Collection House.

	Balance	**0-30 Days**	**30-60 Days**	**60-90 Days**	**90+ Days**
No. of Customers	95	27	25	38	35
Total Value	$209,203.42	$30,417.45	$59,110.36	$17,566.72	$102,108.90

Below is an explanation of the debtor types, being a mixture of standpipes, irrigators, emergency works and effluent usage.

90+ days	**Comments**
$2,855.40	Trade Waste debts - Collection attempts unsuccessful, other avenues to be investigated.
$10,359.40	Other Payment Plans – Private Works/Standpipe/Trade Waste.
$88,894.10	Other Overdue Debt with no fixed arrangements – Trade Waste, Irrigators, Standpipes, Emergency works – Overdue letter issued.
60-90 Days	**Comments**
$450.00	Standpipes (includes $225.00 from 2 debtors that have 90+ days)
$17,116.72	Irrigators (includes $1,389.88 from 10 debtors that have 90+days)
30-60 Days	**Comments**
$6,816.11	Standpipes (includes $642.06 from 2 debtors that have 90+ days)
$51,660.27	Trade waste(includes $22,318.53 from 3 debtors that have 90+ days)
$633.98	Other - Raw water

A summary of financial performance against budget is presented below:

End of Month General Ledger - (Operating Only) - REGIONAL SERVICES

As At End Of June 2017

Report Run: 07-Jul-2017 10:33:41 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget $	Revised Budget $	EOM Commitments $	YTD Actual $	Commit + Actual $	Variance %	On target 100% of Year Gone
FITZROY RIVER WATER							
Treatment & Supply							
Revenues	0	0	0	(13,961)	(13,961)	0%	✓
Expenses	9,403,636	9,540,761	19,289	9,172,317	9,191,606	96%	✓
Transfer / Overhead Allocation	322,312	322,312	0	336,447	336,447	104%	✗
Total Unit: Treatment & Supply	***$,725,948***	***$,863,073***	***19,289***	***$,494,803***	***$,514,092***	**96%**	✓
Network Services							
Revenues	(495,000)	(392,200)	0	(273,436)	(273,436)	70%	✗
Expenses	3,387,171	2,878,582	53,153	2,646,750	2,699,904	94%	✓
Transfer / Overhead Allocation	588,782	588,782	0	612,869	612,869	104%	✗
Total Unit: Network Services	***3,486,954***	***3,075,164***	***53,153***	***2,986,183***	***3,038,337***	**99%**	✓
FRW Management							
Revenues	(61,302,114)	(60,752,212)	0	(59,998,434)	(59,998,434)	99%	✗
Expenses	16,370,854	17,155,912	17,827	17,257,354	17,275,181	101%	✗
Transfer / Overhead Allocation	25,876,326	25,840,665	0	25,282,695	25,282,695	98%	✓
Total Unit: FRW Management	***(19,054,534)***	***(17,755,635)***	***17,827***	***(17,458,386)***	***(17,440,558)***	**98%**	✗
Business & Project Services							
Revenues	0	0	0	(1,364)	(1,364)	0%	✓
Expenses	612,016	651,747	253	682,447	682,700	105%	✗
Transfer / Overhead Allocation	50,895	50,895	0	50,066	50,066	98%	✓
Total Unit: Business & Project Services	***662,911***	***702,642***	***253***	***731,149***	***731,403***	**104%**	✗
Total Section: FITZROY RIVER WATER	***(5,185,121)***	***(4,114,756)***	***90,523***	***(4,246,256)***	***(4,155,727)***	**101%**	✓

FRW MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT AS AT 30 JUNE 2017

Customer Service Standards as at 30 June 2017

Meeting Date: 18 July 2017

Attachment No: 2

Fitzroy River Water Performance Plan - Customer Service Standards Year to Date Reporting as at 30 June 2017

Non-Financial Performance Targets

Table Reference	CSS Reference	Performance indicator	Potable Water Schemes: Rockhampton and Gracemere Water Supply Scheme Number of access charges - 37,929 as at January 2017						Potable Water Schemes: Mt Morgan Water Supply Scheme Number of access charges - 1,516 as at January 2017					
			1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date	1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date
Table 1 Water - Day to Day Continuity	CSS1	Extent of unplanned interruptions - connections based (no. per 1,000 connections per year)	19	14	12	14	**<80**	59	9	30	15	19	**<80**	73
	CSS2	Extent of unplanned interruptions - incidents based (no. per 100 km of main per year) Rockhampton and Gracemere 769 km Mt Morgan 71 km	11	17	19	11	**<30**	58	4	7	1	7	**<30**	19
	CSS3	Time for restoration of service - unplanned interruptions (% restored within 5 hours)	100%	98%	94%	100%	**>90%**	98%	62%	100%	68%	100%	**>90%**	83%
	CSS4	**Customer interruption frequency:**												
		1 interruption per year	2.04%	2.32%	1.50%	1.68%	**12%**	7.54%	0.86%	7.33%	2.77%	1.45%	**12%**	12.41%
		2 interruptions per year	0.18%	0.00%	0.28%	0.07%	**2%**	0.53%	0.00%	2.24%	ND	1.51%	**2%**	3.75%
		3 interruptions per year	0.00%	ND	ND	ND	**1%**	0.00%	0.00%	0.06%	ND	ND	**1%**	0.06%
		4 interruptions per year	0.00%	ND	ND	ND	**0.50%**	0.00%	0.00%	ND	ND	ND	**0.50%**	0.00%
		5 or more interruptions per year	0.00%	ND	ND	ND	**0.25%**	0.00%	0.00%	ND	ND	ND	**0.25%**	0.00%
	CSS5	Relative incidence of planned and unplanned interruption incidents (% of planned versus total number of interruptions)	13%	11%	6%	10%	**>30%**	10%	0%	100%	50%	17%	**>30%**	42%
	CSS6	Average interruption duration - planned and unplanned (hours)	2.92	2.87	1.87	1.78	**3 hrs**	2.36	2.33	2.25	3.17	2.36	**3 hrs**	2.53
	CSS7	**Response time**												
		Priority 1 – 1 hour response	90%	95%	96%	100%	**95%**	95%	83%	100%	100%	100%	**95%**	96%
		Priority 2 – 2 hours response	91%	93%	93%	97%	**95%**	94%	100%	100%	100%	100%	**95%**	100%
		Priority 3 – 24 hours response	99%	99%	100%	100%	**95%**	100%	100%	100%	100%	100%	**95%**	100%
		Restoration time												
		Priority 1 – 5 hours restoration	94%	93%	92%	100%	**95%**	95%	100%	100%	50%	100%	**95%**	88%
		Priority 2 – 24 hours restoration	100%	100%	98%	100%	**95%**	100%	100%	100%	67%	100%	**95%**	92%
		Priority 3 – 5 days restoration	99%	98%	100%	100%	**95%**	99%	100%	100%	100%	100%	**95%**	100%

Table Reference	CSS Reference	Performance indicator	Potable Water Schemes Rockhampton and Gracemere Water Supply Scheme Number of access charges - 37,929 as at January 2017						Potable Water Schemes Mt Morgan Water Supply Scheme Number of access charges - 1,516 as at January 2017					
Table 2 Adequacy and Quality of Normal Supply of Water Supply	CSS8	Minimum pressure standard at the water meter (kPa)	220	220	220	220	**220 kPa**	220	220	220	220	220	**220 kPa**	220
	CSS9	Minimum flow standard at the water meter	9	9	9	9	**9 L/min**	9 L/min	9	9	9	9	**9 L/min**	9 L/min
	CSS10	Connections with deficient pressure and/or flow (% of total connections)	0.3%	0.3%	0.3%	0.3%	**<2.5%**	0.3%	2.0%	2.0%	2.0%	2.0%	**<2.5%**	2.0%
	CSS11	Drinking water quality (compliance with industry standard)	100%	100%	100%	100%	**>98%**	100%	100%	100%	100%	100%	**>98%**	100%
	FRW's Drinking Water Quality Management Plan identifies the following key water quality parameters as reference indicators for customer service purposes: Physical and Chemical Water Quality Parameters - Target: >99% of all samples tested compliant with Australian Drinking Water Guidelines and E.coli - Target: None detected in >98% of all samples tested													
	CSS12	Drinking water quality complaints (number per 1,000 connections)	0.37	0.29	0.24	0.21	**<5**	1.11	0.66	2.64	1.32	1.32	**<5**	5.94
	CSS13	Drinking water quality incidents (number per 1,000 connections)	0	0	0	0	**<5**	0	0	0	0	0	**<5**	0

Table Reference	CSS Reference	Performance indicator	Potable Water Schemes Rockhampton and Gracemere Water Supply Scheme Number of access charges - 37,929 as at January 2017						Potable Water Schemes Mt Morgan Water Supply Scheme Number of access charges - 1,516 as at January 2017					
			1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date	1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date
Table 3 Long Term Continuity of Water Services	CSS14	Water main breaks (number per 100 km main) Rockhampton and Gracemere 769 km Mt Morgan 71 km	3	4	5	3	**<40**	15	8	8	10	6	**<40**	32
	CSS15	Water services breaks (number per 1,000 connections)	4	5	7	6	**<40**	22	6	9	21	7	**<40**	43
	CSS16	System water loss (litres per connection per day)	101	135	82	147	**< 200 L**	116.25	94	114	107	107	**≤ 200 L**	106

Table Reference	CSS Reference	Performance indicator	Sewerage Schemes: Rockhampton and Gracemere Sewerage Scheme Number of access connections - 50,902 as at January 2017						Sewerage Schemes: Mt Morgan Sewerage Scheme Number of access connections - 506 as at January 2017					
			1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date	1st qtr	2nd qtr	3rd qtr	4th qtr	Annual Target	Year to Date
Table 4 Effective Transportation of Sewage	CSS17	Sewage overflows – total (number per 100 km main) Rockhampton and Gracemere 740 km Mt Morgan 13 km	14.13	6.58	18.33	11.08	**<30**	50.12	0	9.09	0	0	**<10**	9.09
	CSS18	Sewage overflows to customer property (number per 1,000 connections)	1.99	0.93	2.57	1.61	**<10**	7.1	0	1.98	0	0	**<5**	1.98
	CSS19	Odour complaints (number per 1,000 connections)	0.18	0.22	0.1	0.29	**<1**	0.79	0	0	0	0	**<1**	0
	CSS20	**Response time**												
		Priority 1 – 1 hour response	54%	92%	68%	100%	**>95%**	79%	ND	ND	ND	ND	**>95%**	#DIV/0!
		Priority 2 – 2 hours response	92%	96%	93%	97%	**>95%**	95%	ND	100%	ND	ND	**>95%**	100%
		Priority 3 – 24 hours response	98%	96%	100%	100%	**>95%**	99%	ND	ND	ND	ND	**>95%**	#DIV/0!
		Restoration time												
		Priority 1 – 5 hours restoration	85%	96%	66%	75%	**>95%**	81%	ND	ND	ND	ND	**>95%**	#DIV/0!
		Priority 2 – 24 hours restoration	99%	99%	96%	100%	**>95%**	99%	ND	100%	ND	ND	**>95%**	100%
		Priority 3 – 5 days restoration	100%	100%	97%	100%	**>95%**	99%	ND	ND	ND	ND	**>95%**	#DIV/0!
Table 5 Long Term Continuity of Sewerage Services	CSS21	Sewer main breaks and chokes (number per 100 km main) Rockhampton and Gracemere 740km Mt Morgan 13 km	18.75	13.71	26.86	21.08	**<50**	80.4	ND	ND	ND	ND	**<20**	0
	CSS22	Sewer inflow and infiltration (ratio of Peak Day Flow to Average Day Flow)	5.8	1.18	4.8	3.6	**<5**	3.85	2.33	1.43	2.6	1.28	**<5**	1.91

Reference Codes
A blank field should contain one of the following:
a. **0** (zero)
b. **ND** (no data is available, although the indicator is relevant)
c. **NR** (not relevant; the indicator is not relevant to that scheme)

FRW MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT AS AT 30 JUNE 2017

Customer Service and Financial Targets as at 30 June 2017

Meeting Date: 18 July 2017

Attachment No: 3

Fitzroy River Water Performance Plan - Customer Service Standards Year to Date Reporting as at 30 June 2017 (cont)

Customer Service Targets

Table Reference	Performance indicator	1st qtr	2nd qtr	3rd qtr	4th qtr	Target	Year to Date
Table 6	Installation of new water connections (within the water service area)	92%	90%	84%	92%	**15 working days**	90%
	Installation of sewerage connections (within the sewered area)	80%	90%	66%	60%	**15 working days**	74%
	Complaints – (excluding maintenance of water and sewerage services) – advise outcome	100%	100%	100%	100%	**20 working days**	100%

Financial Performance Targets

Table Reference	Performance indicator	1st qtr date reported	2nd qtr date reported	3rd qtr date reported	4th qtr date reported	Target
Table 7	RRC Operational Plan Reporting Frequency: quarterly	20/10/2017	24/01/2017	27/04/2017	10/07/2017	**Initiatives successfully completed by year end**
	Operating Budget Reporting Frequency: quarterly or when variations arise	30/09/2016	31/12/2016	31/03/2017	30/06/2017	**Conduct all activities in accordance with required timelines and budget**
	Annual Revenue Reporting Frequency: quarterly or when variations arise	30/09/2016	31/12/2016	31/03/2017	30/06/2017	**Timely reporting of any significant variations to budget revenue and collection timing**
	Capital Works Reporting Frequency: quarterly or when variations arise	30/09/2016	31/12/2016	31/03/2017	30/06/2017	**Completion of capital program in accordance with adopted timeframe and budget (within 3%)**

FRW MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT AS AT 30 JUNE 2017

Non Compliance Comments as at 30 June 2017

Meeting Date: 18 July 2017

Attachment No: 4

Customer Service Standards - Non Compliance Comments for the 30 June 2017 Quarter

Table Reference	CSS Reference	Scheme	Comment
Table 1 Water - Day to Day Continuity	CSS2	Rockhampton and Gracemere Water Supply Scheme	A total of 440 unplanned incidents for the year affecting a total of 2216 connections for the year. As this is incident based, a large number of interruptions to individual properties has resulted in a non compliance.
	CSS3	Mt Morgan Water Supply Scheme	A total of 129 connections affected due to unplanned water shut downs for the year, complexity of repairs resulted in extended restoration times in some cases.
	CSS4	Mt Morgan Water Supply Scheme	The percentage exceeds the target due to 23 water main breaks for the year, with a small number of mains experiencing repeated failures. These water mains will be scheduled for inclusion in capital replacement programs.
	CSS5	Rockhampton and Gracemere Water Supply Scheme	Due to the ageing infrastructure Rockhampton has had 440 unplanned versus 48 planned water shut downs for the year. A water mains replacement program is in place, however a reduction in planned interruptions due to nature of construction projects can contribute to this non compliance.
	CSS7	Rockhampton and Gracemere Water Supply Scheme	**Response** P2 - Total of 340 requests and 314 responded to within 2 hour response time for the year. Network Operations staff continue to allocate resources and prioritise requests in order to improve service standard compliance, although current service standard is only 1% below annual target.
	CSS7	Mt Morgan Water Supply Scheme	**Restoration** P1 - Total of 18 requests and 15 restored within 5 hour restoration time for the year. P2 - Total of 17 requests and 16 restored within 24 hour restoration time for the year. As above, location and complexity of water main failures in Mount Morgan has resulted in extended restoration times in some cases. These instances will be significantly reduced as a result of the current and future capital replacement programs.
	CSS12	Mt Morgan Water Supply Scheme	A slight exceedance of the target was recorded due largely to the effect a small number of complaints has on this target when expressed as the number of complaints per 1000 connections. Mount Morgan has only 1516 connections.
Table 4 Effective Transportation of Sewage	CSS17	Rockhampton and Gracemere Sewerage Scheme	A total number of 580 blockages and 361 overflows for the year. A signficant number of the overflow events were associated with rainfall events in late March and also as a result of TC Debbie. FRW is continuing to implement approved inspection programs in order to reduce the amount of storm water entering the sewerage network. Programs have proven successful with a large number of defects found and rectified in areas proven to be prone to high levels of inflow/infiltration.
	CSS20	Rockhampton and Gracemere Sewerage Scheme	**Response** P1 -Total of 157 requests and 152 responded to within 1 hour response time for the YTD. Increased number of requests during significant rainfall events has resulted in extended response times.
	CSS21	Rockhampton and Gracemere Sewerage Scheme	Rockhampton and Gracemere sewerage system sustained 580 breaks and chokes for the year. A total of 203 were mainline blockages resulting in 361 overflows, increased number of overflows experienced during significant rainfall events.

8.3 ROCKHAMPTON REGIONAL WASTE & RECYCLING MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT MAY AND JUNE 2017

File No:	**7927**
Attachments:	**1. Rockhampton Regional Waste & Recycling Monthly Operations and Annual Performance Plan Report May and June 2017**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Craig Dunglison - Manager RRWR**

SUMMARY

The purpose of this report is to provide Council with an overview of Rockhampton Regional Waste and Recycling (RRWR) for the months of May and June 2017.

OFFICER'S RECOMMENDATION

THAT the RRWR Operations and Annual Performance Plan Report May and June 2017 be received.

ROCKHAMPTON REGIONAL WASTE & RECYCLING MONTHLY OPERATIONS AND ANNUAL PERFORMANCE PLAN REPORT MAY AND JUNE 2017

Rockhampton Regional Waste & Recycling Monthly Operations and Annual Performance Plan Report May and June 2017

Meeting Date: 18 July 2017

Attachment No: 1

Rockhampton Regional Waste & Recycling Monthly Operations and Annual Performance Plan Report

Periods Ended 31 May 2017 and 30 June 2017

VARIATIONS, ISSUES AND INNOVATIONS

Container Deposit Legislation / Scheme (CDS)

As previously outlined to Council; the Rockhampton Regional Council has an officer on a Local Government Working Group which is providing advice to the State Government on the introduction of the this scheme currently beginning on the 01 July 2018.

The CDS will permit all persons in Queensland to return most drink containers from 150ml to 3L in size, excluding fresh milk, fruit juice and wine containers to a location and be given 10 cents per container.

The Scheme will result in less product being collected and processed by the Council's recycling service as persons seek the 10 cent refund. The recycling service will not be able to realistically reduce its operating costs though. Current estimates predict that the income generated by the extra income from the container deposit fee from the eligible containers remaining in the service's product that it collects will easily off set this.

Once the product is collected and is handed over the MRF for processing the product becomes the property of Council's contractor and therefore the eligible body to collect the 10 cents per eligible container. Their intention in regards to this extra income is unknown at this point in time. Discussions are being planned.

Kershaw Gardens – post cyclone Marcia - additional environmental monitoring

Council is aware that Cyclone Marcia caused significant damage to the trees located at Kershaw Gardens. This damage include a large of trees being uprooted which exposed large areas of waste (old landfill).

Subsequent meetings with EHP resulted in Council being required to undertake additional monitoring at the site. The monitoring has been undertaken for a full year (all seasons) and the results were presented to EHP. Sampling was undertaken from sites above and below Kershaw Gardens in Moores Creek. The results were compared to the receiving environment that is a riverine and marine environment. In summary the results were highly varied through the year and no clear linkages could be made to rain events or any other likely influence on the site. There does not appear to be any significant impact upon the surrounding environment due to the impact of Cyclone Marcia

EHP has agreed for the additional sampling to cease. As the site is a closed landfill the standard sampling and analysis for this type of site will continue.

Biomax Pty Ltd – organic processing plant visit

In June the Manager of RRWR and the Senior Executive Trade and Investment officer from Council's Economic Development Unit attended the Biomax trial plant in Stawell Victoria. The purpose of the visit was to meet with the management of Biomax and to visit the operational plant at the Frewstal Abattoir. An earlier teleconference had occurred which led to this meeting and field visit.

The Biomax process can accept up to 50 tonnes of feedstock daily. The feedstock could be organics from a bin system, green waste mulch, sewage sludge, manure, waste cardboard, paunch. This feedstock is placed in the vessel with a special bacteria manufactured by Biomax and mixed and heated for 24 hours. After this process the output is a fertiliser which is pelletised and bagged. This product is currently being sold in Victoria.

The following matters were discussed;

- the details of the process and energy requirements;
- likely emissions from the process - odours;

- what feedstock can the process accept and what is the batch size;
- feedstock available in Rockhampton;
- how the process would handle contaminates likely to be found in the organics from a bin system;
- how could the process be introduced into Rockhampton;
- EHP and Town Planning approval processes undertaken in Victoria;
- Options for the establishment of the process in Rockhampton;
- Rockhampton Trial?;
- Information that Council would need to verify – from itself and from Biomax.

This process has great potential for Rockhampton as the process is a batch process in the tonnage range that could be supplied locally, i.e. via a third organics bin in the longer term or by green waste mulch and sewage sludge in the immediate future. Also the product currently does have a market and is being sold in Victoria.

One of the major aims of the introduction of this type of process i.e. turning waste into a marketable product is that the process will make a return for the ratepayer and either patrial or totally offset the cost to the ratepayer to help establish and maintain the process. Also this process will greatly assist Council in meeting its targets in the Waste Reduction and Recycling Plan.

The next step will be to verify the potential feedstock tonnages immediately and in the longer term available in Rockhampton. Also to verify the best and most appropriate way to manage the introduction of this process to Rockhampton and to verify the economics of the process and its (potential) markets locally and in Queensland.

1 Organic fertilizer product from

Lakes Creek Road, Bird Management

Ecosure have recently been engaged for a further 12 months to assist with Bird management activities at Lakes Creek Road. An intensive 2 week dispersal campaign has been undertaken to coincide with the breeding season for Ibis to discourage them from breeding nearby the Lakes Creek Road Waste Management Facility. Council Staff are also in the process of being trained in bird dispersal so that Council can complement the work undertaken by Ecosure. Earthworks, along northern boundary of Lakes Creek Road Waste Management Facility, to create a free draining environment, and to remove the

breeding habitat for Ibis is nearing completion. Landscaping works will follow once the earthworks are appropriately progressed.

2 Earthworks along northern boundary of Lakes Creek Road Landfill

Lakes Creek Road, Inert Waste Recycling

From 1 July 2017 all Inert Waste received at Lakes Creek Road Waste Management Facility will be screened to produce two fractions. A fines portion for use on-site as landfill cover and road construction and oversize, which will be crushed to produce a useable rubble material for use on-site as road and hardstand construction materials. This initiative will increase our overall waste diversion targets.

3 Oversize after Screening reading for crushing

4 Fines after Screening

Waste and Recycling Collection Services - Assisted Services – 2 yearly review

In the month of August letters will be sent out to all 150 existing Assisted Services (Walk ins) requesting if the service is still required and that they return to Council the completed application form signed by their medical advisor; i.e. GP, nurse, social worker, etc. The application form with a return-addressed envelope will be sent with the explanatory letter envelope. Telephone contact details for Council will also be provide if the person wishes to speak to a Council officer about the matter.

Gracemere, Bouldercombe, Mount Morgan Transfer Station Greenwaste Pads

Greenwaste pads at our Gracemere, Bouldercombe and Mount Morgan Transfer Stations have recently been repaired using recycled materials.

Kerbside Recycling Collections – Contract No. 9290

Council is advised that the Kerbside Recycling Collections contract which commenced on 4 July 2011 will expire on 30 June 2018. Accordingly, this is an opportune time for Council to consider and may provide comment on the delivery of this service.

At an officer level it is apparent that the community want and accept the service due to its environmental benefits. People feel good by recycling and doing their bit for the environment and equally Council has taken a responsible approach in managing waste, aligning the service with the objectives of its Waste Reduction and Recycling Plan 2015-2026. The recycling collection service collects 114 tonne of material each week or approximately 6,000 tonnes per annum for processing. This service minimises landfill airspace utilisation by diverting kerbside waste to resource recovery and ultimately beneficial re-use.

Contracts of this magnitude take time in their drafting and review, but more importantly, it is the tool up time that a Contractor requires to provide the necessary plant and equipment for performing the service. New vehicles are required at the start of a contract and now days with regular maintenance have a useful life of 10 years. Contracts of this duration give the best possible price to Council as plant, equipment and associated costs are written off over a longer period.

Whilst tender documents are being prepared there is minimal effort in including a provision for tendering or seeking a price on the provision of waste collection services. This process will enable Council to benchmark its current operations against industry standards.

Accordingly, tender documents will be prepared for Waste and Recycling Collection Services and anticipated timeframes include, drafting by end of September 2017 and Tendering by October/November 2017. Subject to tender assessment and reporting awarding is scheduled for February 2018.

Monthly Traffic Light Report – RRWR

All Monthly Requests (Priority 3)
RRW&R 'Traffic Light' report
May 2017

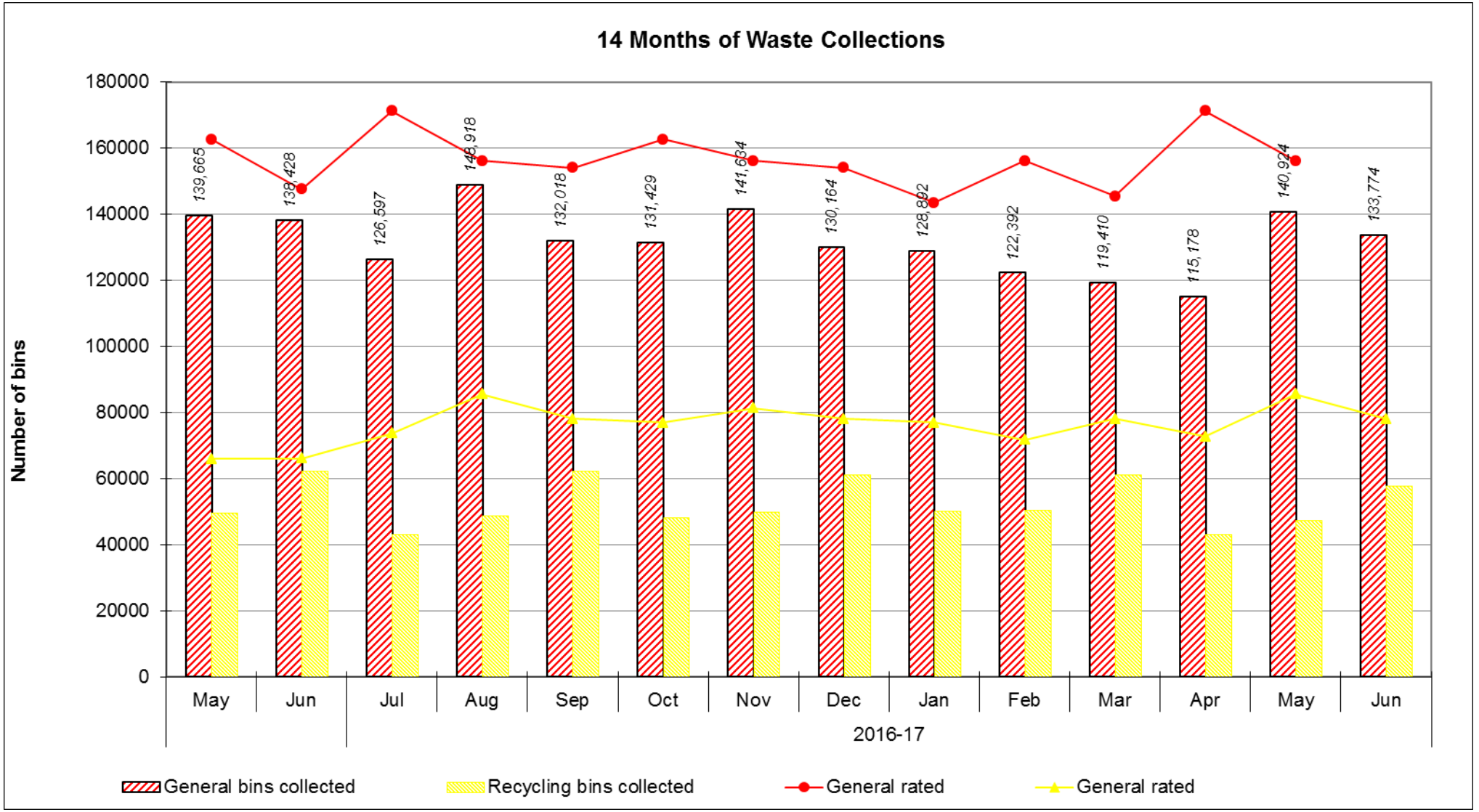
	Balance B/F	Completed in Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	On Hold	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and incomplete)
			Received	Completed							
Waste/Recycling - RATES NOTICE QUERY	0	0	0	0	0	0	10	0.00	4.86	3.00	1.50
Additional Recycling Service (Fee applies) JJ RICH	0	0	1	1	0	0	2	2.00	1.29	1.11	0.30
Additional Waste Service (Fee applies) RRC	2	2	8	7	1	0	2	0.57	0.49	0.46	0.31
Park Bins (RRC Park/Reserve areas)	2	1	2	2	1	0	23	2.50	2.79	3.51	2.84
Change to Exisiting Bins (JJ RICHARDS)	1	0	19	18	2	0	5	2.33	2.31	2.40	1.79
Change to Exisiting Bins (RRC)	5	4	18	15	3	1	2	1.60	1.15	1.48	0.67
Missed Service Recycling - SAME DAY JJ RICHARDS	0	0	5	5	0	0	2	3.80	1.80	1.79	0.71
Missed Service Waste - SAME DAY ENQUIRY RRC	1	1	37	31	6	0	2	0.52	0.49	0.52	0.46
Missed Recycling Bin JJ (Not out or Truck Missed)	1	1	31	26	5	0	2	1.88	1.44	1.50	0.88
Missed General RRC (Bin Not Out or Truck Missed)	5	4	31	23	9	0	2	0.61	0.47	0.47	0.59
New (First) Bin Set Up (Domestic/Recycle & Comm)	0	0	24	23	1	0	5	1.74	1.88	2.38	1.66
Repair JJ Richards Recycle (Bin To Be Empty)	0	0	1	0	1	0	5	0.00	3.80	3.71	1.64
Repair RRC General Waste Bin (Bin To Be Empty)	7	7	32	29	3	0	2	1.10	1.29	1.30	0.96
Replacement Bin JJ (Damaged/Lost/Stolen)	4	3	16	11	6	0	5	1.00	2.88	3.00	2.29
Replacement Bin RRC (Damaged/Lost/Stolen)	16	15	110	91	19	1	2	0.88	1.56	1.42	1.09
Special Event Bins (Parks/Halls etc)	1	1	9	9	0	0	2	1.78	1.52	1.25	0.52
Landfills & Transfer Station - Waste Facilities	0	0	3	3	0	0	1	0.00	1.26	1.20	0.48
Waste and Recycling General Query	23	15	38	30	16	0	5	1.60	5.99	4.76	4.73
Compliment or Complaint RRC or JJ Richards	0	0	1	1	0	0	2	0.00	0.81	1.58	0.50

All Monthly Requests (Priority 3)
RRW&R 'Traffic Light' report
June 2017

	Balance B/F	Completed in Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	On Hold	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and incomplete)	Avg Completion Time (days) Q4
			Received	Completed								
Waste/Recycling - RATES NOTICE QUERY	0	0	1	1	0	0	10	5.00	5.29	3.15	1.82	5.00
Additional Recycling Service (Fee applies) JJ RICH	0	0	1	1	0	0	4	0.00	0.73	1.05	0.27	1.00
Additional Waste Service (Fee applies) RRC	1	1	9	9	0	0	4	0.89	0.56	0.53	0.33	0.70
Park Bins (RRC Park/Reserve areas)	2	1	3	3	1	0	23	1.00	4.14	4.10	3.34	5.13
Change to Exisiting Bins (JJ RICHARDS)	2	1	4	4	1	0	5	0.75	2.09	2.48	2.08	1.85
Change to Exisiting Bins (RRC)	3	3	5	5	0	0	4	2.60	1.36	1.53	0.64	1.88
Missed Service Recycling - SAME DAY JJ RICHARDS	0	0	10	9	1	0	4	2.56	1.92	1.83	0.74	2.52
Missed Service Waste - SAME DAY ENQUIRY RRC	6	6	39	39	0	0	4	0.44	0.48	0.51	0.45	0.43
MIssed Recycling Bin JJ (Not out or Truck Missed)	5	5	22	22	0	0	4	1.45	1.46	1.53	0.93	1.63
Missed General RRC (Bin Not Out or Truck Missed)	9	9	25	24	1	0	4	0.54	0.48	0.48	0.41	0.41
New (First) Bin Set Up (Domestic/Recycle & Comm)	1	1	21	21	0	0	5	1.62	1.77	2.29	1.58	1.56
Repair JJ Richards Recycle (Bin To Be Empty)	1	1	1	1	0	0	5	0.00	3.75	3.64	1.64	4.40
Repair RRC General Waste Bin (Bin To Be Empty)	3	3	22	17	5	0	4	1.53	1.31	1.36	1.11	1.03
Replacement Bin JJ (Damaged/Lost/Stolen)	6	5	4	4	1	0	5	2.50	3.00	3.01	2.56	2.31
Replacement Bin RRC (Damaged/Lost/Stolen)	19	19	66	60	6	0	4	1.10	1.48	1.46	1.03	0.89
Special Event Bins (Parks/Halls etc)	0	0	6	5	1	0	4	0.40	1.45	1.17	0.51	1.30
Landfills & Transfer Station - Waste Facilities	0	0	6	3	3	0	1	1.00	1.24	1.15	0.61	0.80
Waste and Recycling General Query	13	10	34	30	6	1	5	1.23	5.85	4.70	4.90	1.48
Compliment or Complaint RRC or JJ Richards	0	0	4	4	0	0	2	1.00	0.78	1.56	0.48	0.50

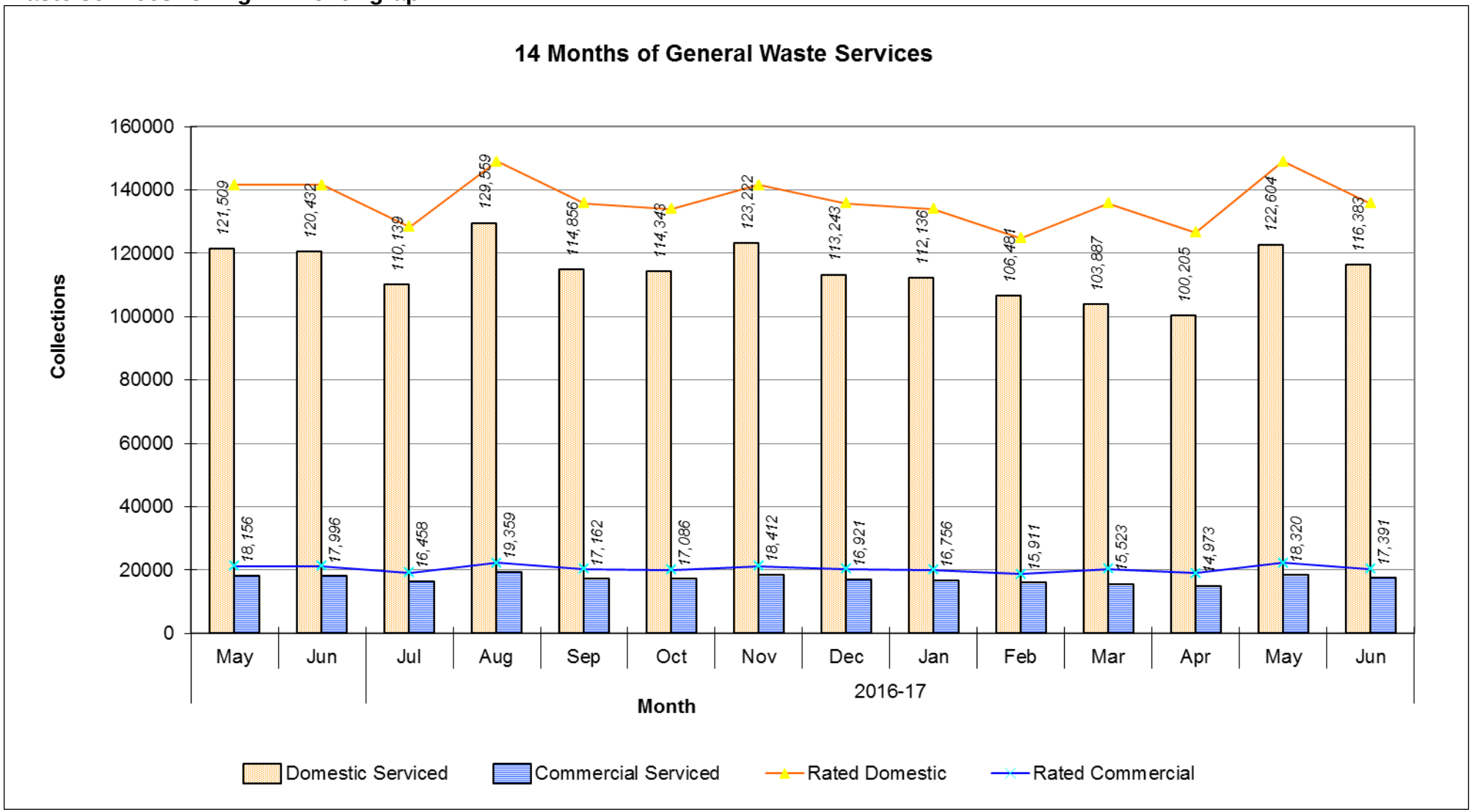
Comment:
Nil

Waste collections rolling 14 month graph



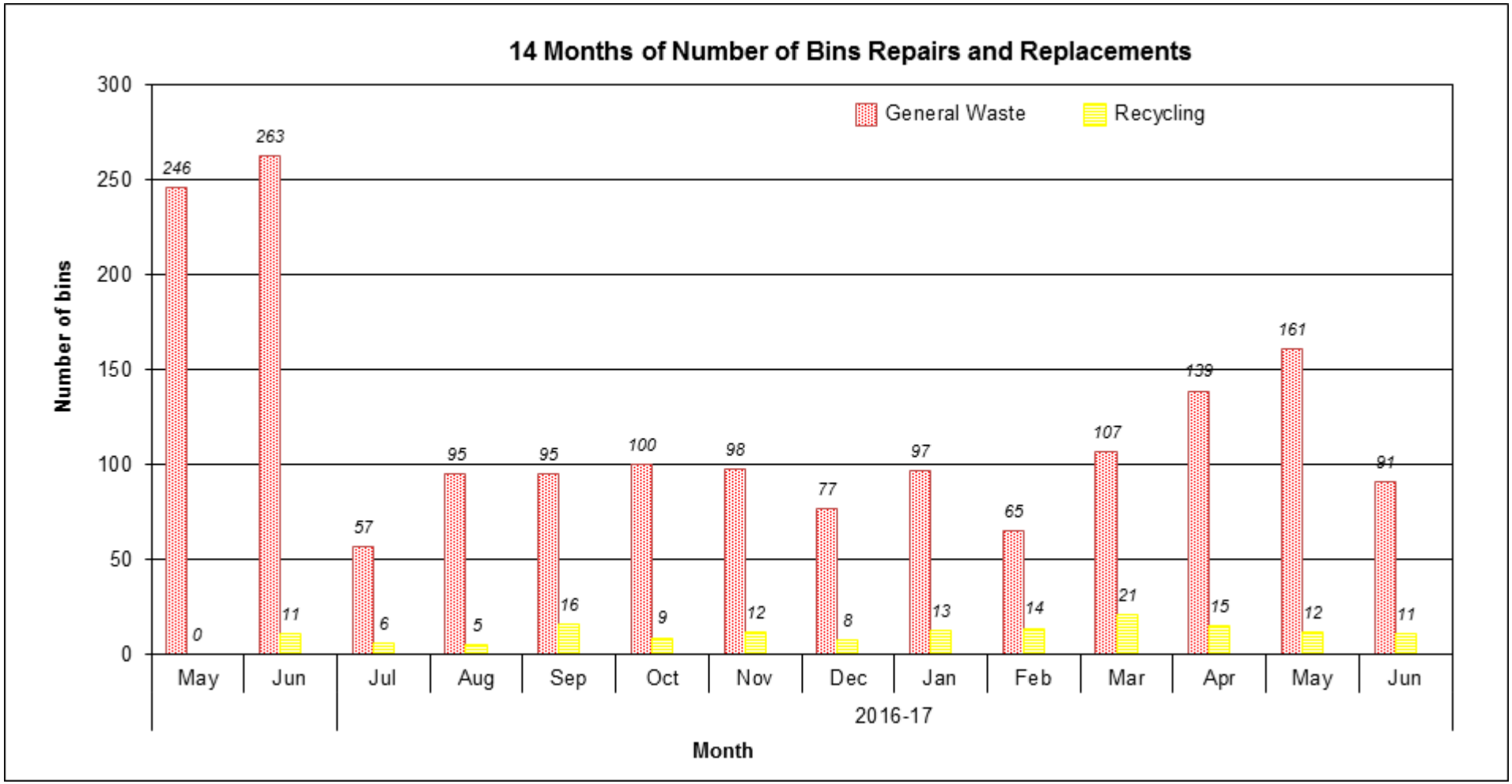
The graphs above shows the number of General Waste and Recycling bins serviced on a monthly basis during the past 13 month period.

Waste services rolling 14 month graph



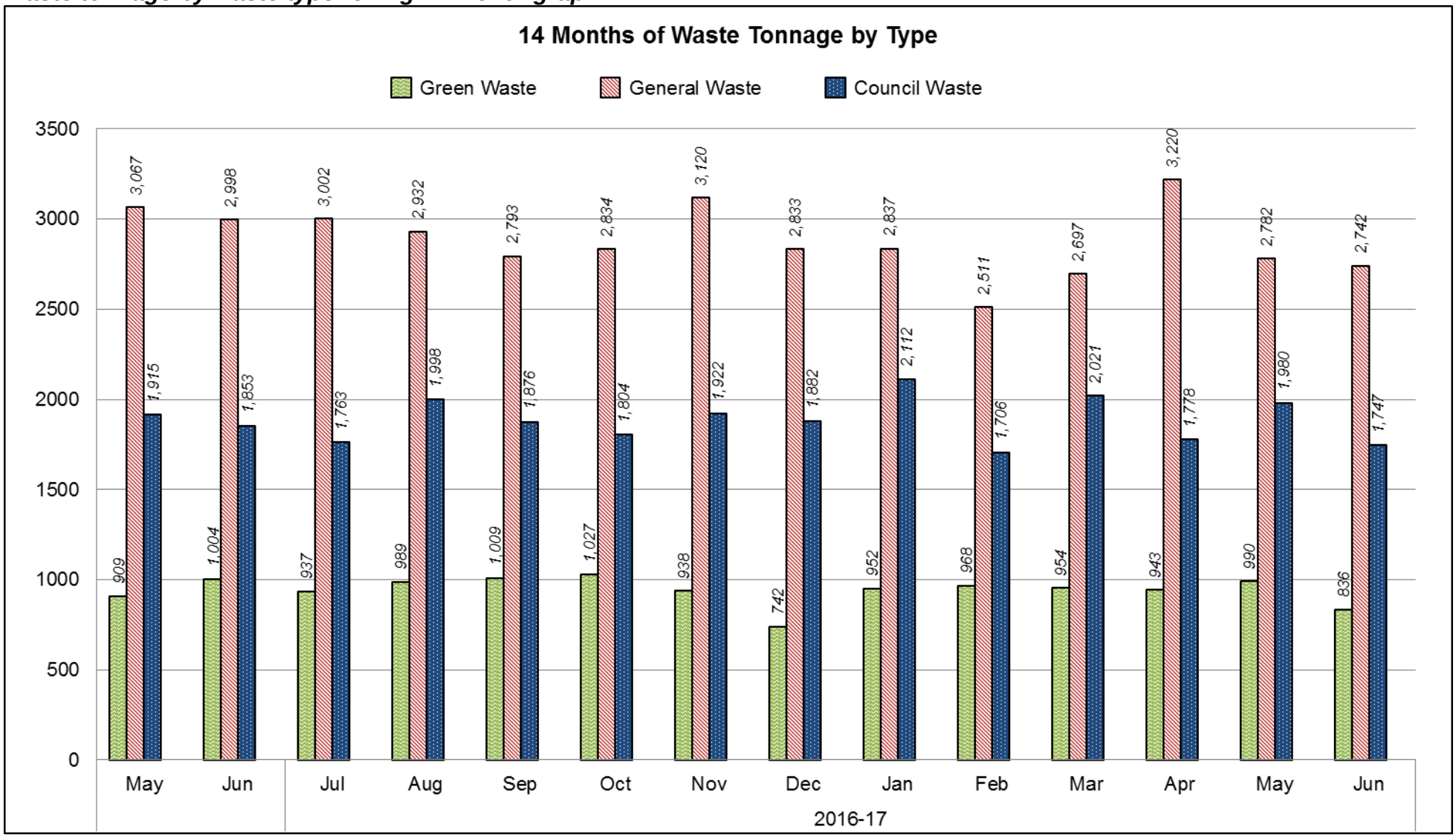
The graph above depicts the division of domestic and commercial waste collection services on a monthly basis during the past 13 month period. Fluctuations from month to month are true to months showing four and five week periods.

Wheelie bin repair and replacement rolling 14 month graph



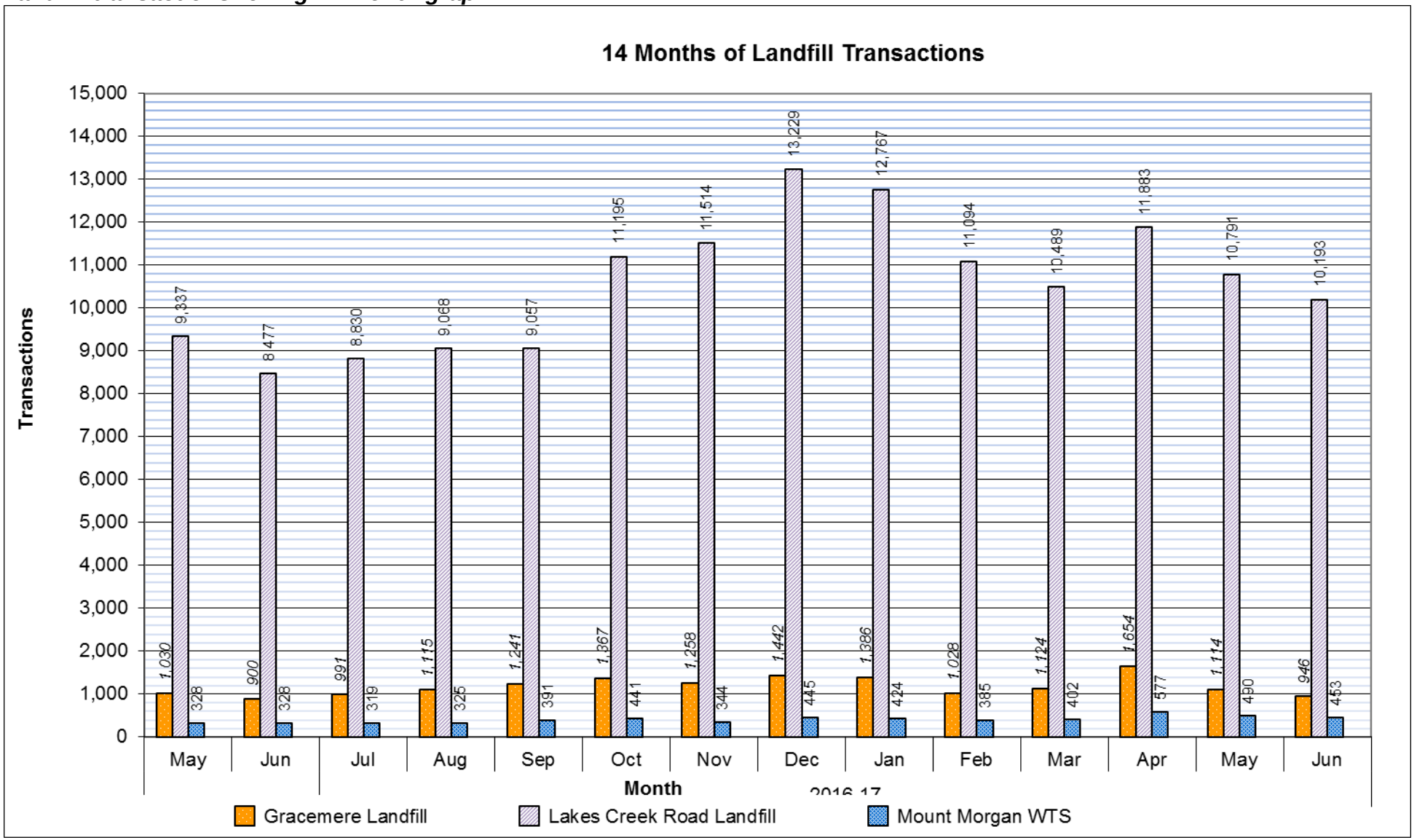
The graph above shows the number of wheelie bins replaced on a monthly basis during the past 13 month period. There has been a significant drop off with bin replacement requests due to enforcing policy which requires payment or police report for stolen or damaged bins.

Waste tonnage by waste type rolling 14 month graph



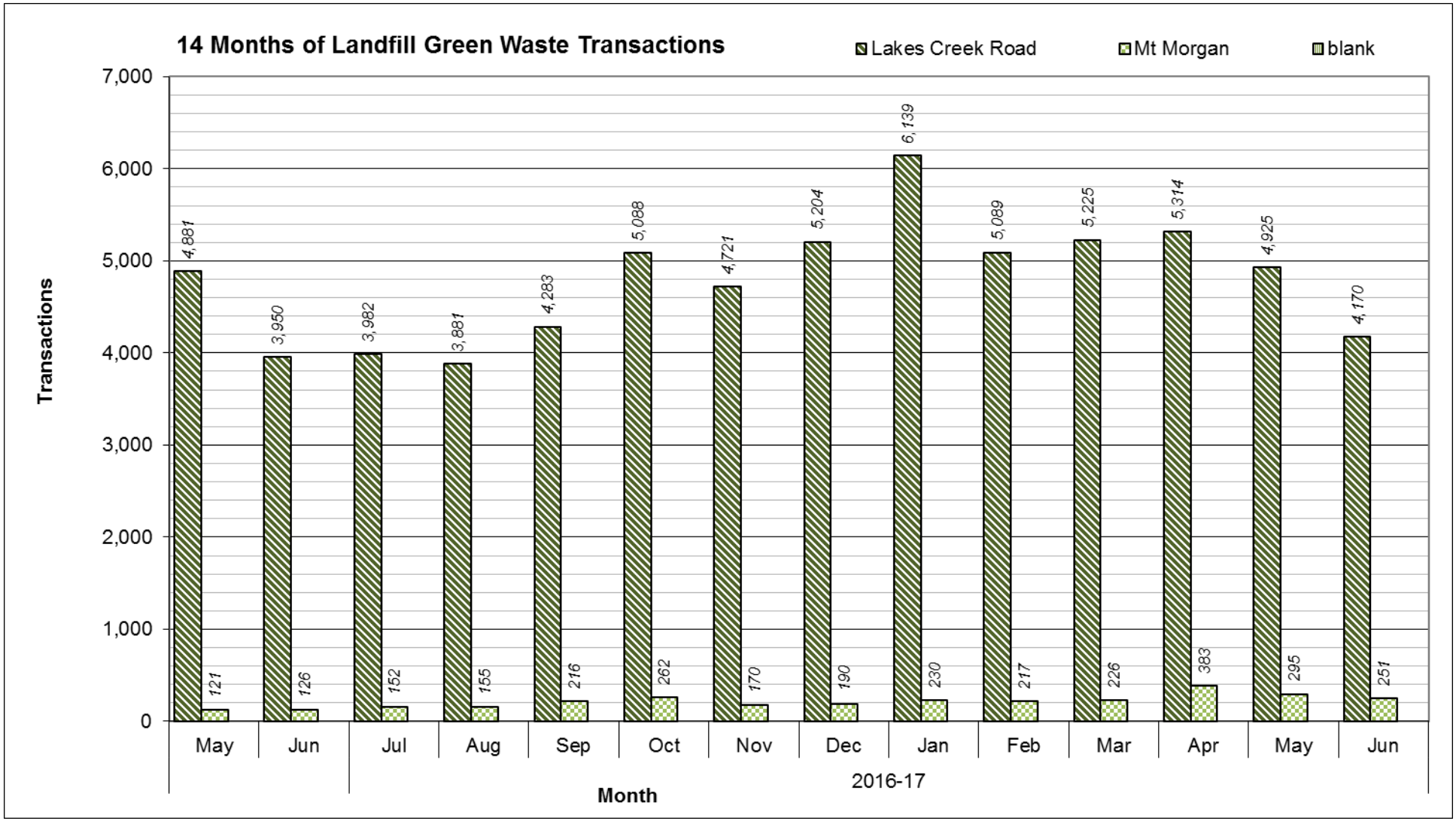
The graphs above show waste tonnage by waste types accepted at all facilities on a monthly basis during the past 13 month period.

Landfill transactions rolling 14 month graph



The graphs above show the number of transactions to landfill facilities on a monthly basis during the past 13 month period.

Green waste transactions rolling 14 month graph



The graphs above shows the number of Green Waste Transactions accepted at facilities with electronic record keeping capabilities on a monthly basis during the past 13 month period.

COMPLIANCE WITH STATUTORY AND REGULATORY REQUIREMENTS INCLUDING SAFETY, RISK AND OTHER LEGISLATIVE MATTERS

Safety Statistics

The safety statistics for the reporting period are:

	LAST QUARTER 2016/17		
	APRIL	**MAY**	**JUNE**
Number of Lost Time Injuries	0	1	0
Number of Days Lost Due to Injury	0	3	19
Total Number of Incidents Reported	0	5	0
Number of Incomplete Hazard Inspections	0	0	0

RRWR reached the record breaking milestone of 268 days LTI free but in early May, due to an incident; the counter has been reset. At the end of June 2017 RRWR were already back up to 52 days LTI free.

Risk Management Summary

Example from Section Risk Register (excludes risks accepted/ALARP)

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Loss of a major waste management facility due to a natural or man-made disaster, i.e. flood, storm damage, discovery of unexploded ordinance, discovery of a hazardous waste type, etc. which may result in the community not having any location to effectively dispose of its waste causing possibly a decrease in public health and a significant potential for large scale environmental harm to be caused. This will cause Council strong damage to its reputation and a strong loss of confidence in the ability of Council to manage large facilities/processes on behalf of the community.	Low 7	Nil	N/A	N/A	Nil action this period
Failure to adequately fund, maintain and have operational Council's waste asset system which may result in financial loss through increased maintenance costs and service delivery disruptions; and a loss of confidence in Council's ability to manage a large facility on behalf of the community.	Low 7	Nil	N/A	N/A	The new RRWR Project Engineer has been appointed and will commence work at the end of June. Once established in his position, he will commence work with the Asset Unit where possible. He will also participate in the current assessment of the possible Asset Management System on behalf of RRWR
The objectives, targets and actions plans contained in Council's Waste Reduction and Recycling Plan 2015-2024 (WRRP) [Strategic Waste Management Plan] are not realised affecting Council's reputation through	Low 6	1. Develop plans and budget to fulfil actions listed in the WRRP	N/A	N/A	Waste Awareness Officer has not had her position renewed. Work is underway to determine the future approach

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
broadening negative publicity with loss of customer confidence in the ability to manage a large facility/process on behalf of the community.					

2. DELIVERY OF SERVICES AND ACTIVITIES IN ACCORDANCE WITH COUNCIL'S ADOPTED SERVICE LEVELS

SERVICE DELIVERY STANDARD	Target	Current Performance
Weekly collection of domestic waste on same day every week	98%	99.97%
Weekly collection of commercial waste	95%	99.97%
Fortnightly Collection of domestic recyclable waste	98%	99.93%
Fortnightly Collection of commercial recyclable waste	98%	99.93%
Missed service collection provided within two working days from notification when notification is within one working day of scheduled collection	95%	91.41%
Collection services will be made available within four working days upon application by owner	98%	86.24%
Provision of assisted services within ten working days from application by owner	100%	87.31%
Repair or replacement of stolen, removed, damaged, vandalised mobile bins within four working days from notification	100%	84.85%

as at end of 2016/17

3. ACHIEVEMENT OF CAPITAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

The following abbreviations have been used within the table below:

LCRL	Lakes Creek Road Landfill
WTS	Waste Transfer Station

ROCKHAMPTON REGIONAL WASTE & RECYCLING CAPITAL WORKS PROGRAM

2016/2017

LCRL – Remediation	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	*30/06/17*	*100%*	*$840,000*	*$936,512*
Comment: Capping and remediation of LCR landfill is ongoing with majority of funding allocated to finalising Stage 1. Commenced with capping of legacy waste areas as well. Overspend attributed to the capping of the entrance area near the bird watching platform.					
Gracemere WTS Design and Construct	**Start Date**	**Expected Completion Date**	**Status**	**Budget Estimate**	**YTD actual (incl committals)**
	01/07/16	30/06/17	10%	$75,000	$625
Comment: Design phase 16/17 to 17/18 with construction expected to take place in 18/19.					
240Litre Mobile Garbage Bin (Wheelie Bin) Purchases	**Start Date**	**Expected Completion Date**	**Status**	**Budget Estimate**	**YTD actual (incl committals)**
	01/07/16	30/06/17	134%	$140,000	$187,899
Comment: Replacement of rubbish bins. Continued 10% estimated replacement of damaged and new bins from growth.					
Capping and Closure of Stage 1 and 2 – Gracemere landfill	**Start Date**	**Expected Completion Date**	**Status**	**Budget Estimate**	**YTD actual (incl committals)**
	01/07/16	30/06/17	35%	$95,000	$33,536
Comment Completion of stage 1 capping works and commencement stage 2 landfill capping as per approved Closure plan. Part of project to commence for WTF construction stage. Engaged consultant to finalise the capping design. The proposed design is to consider phytocapping.					
LCRL Augmentation	**Start Date**	**Expected Completion Date**	**Status**	**Budget Estimate**	**YTD actual (incl committals)**
	01/07/16	30/06/17	83%	$2,200,000	$1,834,782
Comment: Consultants have finalised the concept design and RRWR are reviewing the documents. Consultant completed design of Cell A with the detail design drawings / technical specifications received by RRWR. Construction of cell A is expected to be complete in October					

2018. Site possession and construction of Cell A is expected to commence early 2018.

LCR Landfill Push pit cover	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	100%	$12,000	$12,637
Comment: Manufacture and install cover over push pit opening for safety.					

LCR Pedestrian Path Office to WTS	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	85%	$45,000	$85,353
Comment: Install footpath between administration office and WTS to mitigate risk for pedestrians traversing between locations. Contractor appointed.					

LCR Front Gates and Lights	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	100%	$1,500	$1,487
Comment:					

LCR Traffic Layout Redesign of Recycle Drop Off Area	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	45%	$200,000	$60,896
Comment: Commenced with concept plans to improve traffic flow through the Recycle Drop Off Area in order to improve safety and increase recycling.					

LCR Stormwater pipes and outlets	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	90%	$100,000	$90,273
Comment: Construction of new stormwater pipes and outlets to minimise volume of contaminated surface water					

LCR Pond B and Pond E overflow	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	0%	$0	$862

Comment: Create an overflow structure to formalise environmental release point. This work forms part of LCR augmentation project and is required to increase the holding capacities of the existing ponds. Expenditure will be transferred to the appropriate capital works number.

LCR Recycle New Roof Structures	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	100%	$45,000	$50,851
Comment: Contractor appointed to proceed with installation of structures					

Automatic Tarping Machine	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
	01/07/16	30/06/17	100%	$109,600	$109,600
Comment: Purchase equipment to reduce the uncovered main face area in order to control bird numbers in line with the Lakes Creek Landfill Bird Management Plan.					

4. FINANCIAL MATTERS

Percentage of year elapsed 100%

End of Month General Ledger - (Operating Only) - REGIONAL SERVICES

As At End Of June 2017

Report Run: 06-Jul-2017 17:07:43 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget $	Revised Budget $	EOM Commitments $	YTD Actual $	Commit + Actual $	Variance %
REGIONAL SERVICES						
WASTE & RECYCLING SERVICES						
RRWR Waste Operations						
Revenues	(5,271,399)	(3,877,564)	0	(3,720,603)	(3,720,603)	96%
Expenses	5,060,329	4,902,838	660,457	4,270,863	4,931,320	87%
Transfer / Overhead Allocation	(579,500)	(799,637)	0	(1,023,413)	(1,023,413)	128%
Total Unit: RRWR Waste Operations	***(790,570)***	***225,637***	***660,457***	***(473,152)***	***187,305***	**-210%**
RRWR Collections						
Revenues	(96,770)	(96,770)	0	(67,453)	(67,453)	70%
Expenses	3,860,514	3,558,914	14,057	3,231,503	3,245,561	91%
Transfer / Overhead Allocation	2,164,276	1,879,061	0	1,822,562	1,822,562	97%
Total Unit: RRWR Collections	***5,928,020***	***5,341,205***	***14,057***	***4,986,612***	***5,000,669***	**93%**
RRWR Management						
Revenues	(13,323,774)	(13,180,912)	0	(13,204,881)	(13,204,881)	100%
Expenses	3,163,797	3,066,438	18,689	3,240,489	3,259,178	106%
Transfer / Overhead Allocation	2,289,310	2,147,016	0	2,207,726	2,207,726	103%
Total Unit: RRWR Management	***(7,870,666)***	***(7,967,458)***	***18,689***	***(7,756,666)***	***(7,737,977)***	**97%**
Total Section: WASTE & RECYCLING SERVICES	***(2,733,217)***	***(2,400,616)***	***693,204***	***(3,243,207)***	***(2,550,002)***	**135%**

Operational Summary

Total revenue is slightly below the percentage of year elapsed at 99.05% however operating expenditure is also lower than the percentage of year elapsed at 93.19% resulting in a greater than anticipated surplus position in comparison to budget.

This position is expected to change once accrual journals and depreciation actuals are posted for year end.

Capital Summary

RRWR capital project expenditure is below the percentage of year elapsed at 89% of the March revised budget. The majority of RRWR's capital expenditure to date relates to the LCR landfill life extension, LCR capping project, purchase of the automatic tarping machine, rubbish bin replacement project, LCR stormwater outlets and LCR Pedestrian Path from Office to WTS.

8.4 MEMBERSHIP REQUEST TO LOCAL AUTHORITY WASTE MANAGEMENT ADVISORY COMMITTEE

File No:	**7927**
Attachments:	**Nil**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Craig Dunglison - Manager RRWR**

SUMMARY

A request has been submitted to Council asking if Council would like to join the Local Authority Waste Management Advisory Committee (LAWMAC).

OFFICER'S RECOMMENDATION

THAT the Airport, Water and Waste Committee recommend to Council that the Rockhampton Regional Council joins the Local Authority Waste Management Advisory Committee (LAWMAC) permitting a Councillor and a Council officer to attend their meetings.

COMMENTARY

The Manager Rockhampton Regional Waste and Recycling (RRWR) was invited as an officer /observer to attend the February Quarterly meeting of the Committee held in Cairns to observe the workings of the Committee.

The quarterly meeting went over two days with presentations on the first day, many from the members and the Committee's formal meeting and further presentations on the second day. Attachment 1 shows the agenda for the February meeting.

As an outcome of the Manager's attendance at this meeting LAWMAC has asked if Rockhampton Regional Council would like to join this organization. The membership of LAWMAC permits one Councillor and officer to attend the quarterly and annual meeting with one voting right for the Councillor or proxy. The fee for membership is based upon the population of the Local Government with Rockhampton fee being $1,862.01 for the 17/18 financial year.

BACKGROUND

Over the last several years staff of RRWR have not been attending industry conferences, seminar or workshops due to work load and work priorities. Important outcomes of attending such events is the ability to network with fellow officers from similar or neighbouring Local Governments as well as keeping up to date with the advances in the industry that the officer works in.

It is felt that it is important that officers from RRWR to be permitted to recommence these activities. LAWMAC is a long standing well-established practical based organization that can provide relevant and up to date information in the Waste / Resource Industry. Also permit officers from RRWR to discuss waste management issues with other Council officers. Frequently other Councils have undertaken projects of trials that RWWR is considering and with the exchange of information RRWR may not need go ahead with a particular project and therefore saving Council funds.

BUDGET IMPLICATIONS

The membership fee and associated attendance cost can be managed inside the existing budget.

STAFFING IMPLICATIONS

Permitting staff to attend these functions will provide Council with a better educated officer who can as required contact officers in other Councils or persons from within the waste industry (they met at these functions) as required for specialized information from time to

time or in an emergency making the officer more appreciative of his employment with Council.

CORPORATE/OPERATIONAL PLAN

RRC Corporate Plan 2017 – 2022:

Page 32: Objective – The key objectives of RRWR are to deliver commercially viable waste and recycling services that satisfy adopted customer service standards.

Page 32: General – Setting the strategic direction for Council's Waste Management Strategy; and Support of education programs in relation to waste minimization, reuse and recycling.

By a Councilor and an officer attending these meetings they will acquire relevant up to date information about the waste industry that will permit RRWR to meet the above Objectives.

CONCLUSION

Council will benefit positively from a Councillor and officer attendance at the LAWMC Meetings.

8.5 COMMUNITY SERVICE OBLIGATIONS FOR ROCKHAMPTON REGIONAL WASTE & RECYCLING

File No:	**7297**
Attachments:	**Nil**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Craig Dunglison - Manager RRWR**

SUMMARY

Activities conducted by Rockhampton Regional Waste & Recycling (RRWR) that are not its commercial interests are identified as a Community Service Obligation (CSO) in order to reflect the requirement for RRWR to operate as a commercial business unit. RRWR's Annual Performance Plan 2016/17 lists the existing CSOs identified for a range of RRWR's current activities.

OFFICER'S RECOMMENDATION

THAT the revised Community Service Obligations for Rockhampton Regional Waste & Recycling included in Appendix 3 of the report be adopted.

BACKGROUND

In accordance with the *Local Government Act*, RRWR is a commercial business unit of Council that undertakes Type 2 business activities in the provision of Waste Services. Section 24 of the *Local Government Regulation 2012* defines a community service obligation as follows:

"A ***community service obligation*** is an obligation the local government imposes on a business entity to do something that is not in the commercial interests of the business entity to do."

A Community Service Obligation (CSO) is to be treated as revenue for the activity of an amount equivalent to the cost of carrying out the obligation less any revenue arising from carrying out the obligation.

RRWR'S CURRENT CSO'S

Currently, RRWR has eleven CSO's that have been identified and adopted by Council as part of RRWR's Annual Performance Plan (adopted March 2017) which amount to a total of $1,599,248, please refer to Appendix A and Appendix B for detail descriptions of these CSO's.

A comparison of YTD actuals to budget as at 31/05/2017 is outlined in Appendix C. It can be seen that YTD actuals have already exceeded budget primarily as a result of Tropical Cyclone Debbie. During the immediate aftermath of the event RRWR was required to conduct a bulk waste collection service to area's severely affected by flood waters. RRWR was also required to provide a number free dumping days to the general public during this time.

The CSO category – Tyres, chemicals, refrigerator degassing, gas bottles; will be amend to remove tyres as a fees is now paid for their disposal.

At all landfill and waste transfer stations cardboard both from commercial and domestic sources is collected and transported to the Material Recovery Facilities (MRF) at Parkhurst. There is no charge for the provision of this service. The current expense involved providing this service is approximately $120,000. This service will be monitored and a formal request for this service to become a CSO will submitted for the next budget.

CONCLUSION

Overall CSO funding provided to RRWR is essential in enabling RRWR to continue to offer these CSO services to the community.

As at 31 May 2017 RRWR has already exceeded their CSO budget as a result of TC Debbie, thus RRWR will be seeking reimbursement for the difference at year end.

Appendix A – Extract from RRWR's Performance Plan

APPENDIX 1: COMMUNITY SERVICE OBLIGATIONS

Community Service Obligations (CSOs) are the activities required by the Council that are not in RRWR's commercial interests to perform and do not arise because of an accountability for performance, or competitive neutrality.

CSOs have been identified and adopted by Council for 2016/17 in the following areas. These CSOs will be funded by a contribution from Council to RRWR.

Transfer:	
Roadside Bin ops (Collection)	$368,968
Roadside Bin ops (Clean Up)	$41,756
Roadside Bins Disposal Cost	$132,859
	$543,583
Collection:	
Boat Ramps Waste Service	$14,843
	$14,843
Disposal:	
Old Landfills maintenance works	$164,000
Tyres, Chemicals, Fridge Degassing, Gas Bottles	$83,511
Charity Waste Policy	$75,919
Green Waste	$590,717
	$914,147
Strategic Management:	
Clean Up Australia Day	$15,818
Waste Education	$50,122
Waste Audit	$60,735
	$126,675
Total	**$1,599,248**

Appendix B – RRWR CSO Detailed Descriptions

Roadside Bin Operations (Collection)	The purpose of this CSO is to offset expenditure associated with the operation of the Rockhampton regions community roadside bin stations and transfer stations. Currently there are 9 roadside bin stations and 3 transfer stations in operation located at Alton Downs, Bouldercombe, Mt Morgan, Bajool, Bushley, Dalma, Gogango, Laurel Bank, Marmor, Upper Ulam, Ridgelands and Westwood.
Roadside Bin Operations (Clean Up)	Funding is to assist with general roadside bin stations clean up expenditure. Ongoing expenditure relates to cleaning up around the bins as a result of rubbish being dumped beside the bins and the occasional surge in rubbish causing an overflow onto the ground requiring frequent clean up by a bobcat and dump truck.
Roadside Bin Disposal Costs	To offset the expenditure associated with the disposal of rubbish at Lakes Creek Road collected from the roadside bin and transfer stations.
Boat Ramp Services	CSO funding is to assist with the collection of bins located at boat ramps within the Rockhampton region to ensure public wellbeing.
Old Landfill Maintenance Works	Old landfill site maintenance works ensures ongoing community safety now and into the future.
Tyres, Chemicals, Fridge Degassing, Gas Bottles	Oils and chemicals must be disposed of in adherence to environmental laws and regulations. The method of disposal required for such items is quite expensive, thus a CSO is provided to RRWR to ensure disposal costs charged to the community is at an affordable rate. This subsidisation stops members of the community illegally dumping such items causing higher costs to be incurred by Council as a result of clean up and environmental damage that could possibly occur.
Charity Waste Policy	The purpose of this CSO is to offset expenditure incurred by RRWR for the dumping of free Charity waste at the landfills.
Green Waste	At the request of Council to make the disposal of Green Waste free to the community, this CSO offsets expenditure associated with inspection and testing for asbestos, mulching and operational management of Green Waste.
Clean Up Australia Day	To assist with offsetting the expense of rubbish being brought into the landfill free of charge as a result of the Clean Up Australia Day Government initiative.
Waste Education	The purpose of this CSO is to assist RRWR to provide education to the community in relation to waste issues leading to environment impacts such as land contamination, illegal dumping, waterway pollution and to educate the public about recycling. It is also used to educate the community on correct waste disposal methods for public wellbeing (hygiene).
Waste Audit	This particular CSO is to assist RRWR in conducting an annual bin audit to gauge the effectiveness of RRWR's education programs as well as help to identify any issues that may require public education.

Appendix C – CSO Actual vs Budget

RRWR'S Community Service Obligations	16/17 Adopted Budget	Actuals as at 31/05/2017
Roadside Bin Operations Collection	$ 368,968	$ 216,639
Roadside Bin Operations Clean Up	$ 41,756	$ 66,753
Roadside Bin Disposal Costs	$ 132,859	$ 88,447
Boat Ramp Services	$ 14,843	$ 3,174
Old Landfill Maintenance Works	$ 164,000	$ 196,828
Tyres, Oils & Chemicals	$ 83,511	$ 16,647
Charity Waste Policy (Estimate)	$ 75,919	$ 45,738
Green Waste	$ 590,717	$ 549,888
Clean Up Australia Day	$ 15,818	$ 104
Waste Education	$ 50,122	$ 47,787
Waste Audit	$ 60,735	$ -
TC Debbie - Expenditure	$ -	$ 408,366
TC Debbie - Loss of revenue tonnes to landfill		$ 60,086
	$ 1,599,248	**$ 1,700,456**

8.6 FITZROY RIVER WATER OPERATIONAL REVIEW

File No:	**1825**
Attachments:	**1. Fitzroy River Water Operational Review Report** **2. State Benchmarking Report 2015-16** **3. Status of Improvement Actions**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Jason Plumb - Manager Fitzroy River Water**

SUMMARY

An external consultant was engaged in early 2016 to undertake a review of FRW and its operational performance. The purpose of the review was to review the practices, procedures and outcomes associated with FRW's water and sewerage operations. A final report was prepared in September 2016 following a number of workshops and interviews with FRW and Council employees, the receipt of feedback from Councillors, and by comparing FRW and its performance to other regional and national water service providers. Overall, the report provides a comprehensive evaluation of FRW's performance as a water service provider and also provides recommendations as to how FRW's performance may be further improved.

OFFICER'S RECOMMENDATION

THAT the report be received and the progress made towards implement the recommendations of the external review noted.

COMMENTARY

Funding was provided in the 2015/16 Budget to undertake a review of FRW and this was commenced earlier in 2016. The purpose of the review was to review the practices, procedures and outcomes associated with the water and sewerage operations including treatment, storage and reticulation in the context of the Council's capacity and capability as well as the particular financial, demographic and geographic characteristics of the Council.

This review included evaluating:

1. the appropriateness of treatment, storage and reticulation processes used by the Council when compared to nationally recognised best practice and industry standards;
2. the performance outcomes of its capital expenditure programs from a long term whole-of-life asset management perspective
3. the appropriateness of current service levels including:
    - performance against service levels; and
    - whether the service levels are comparable to benchmark Councils and industry best practice.
4. the appropriateness of FRW's planning processes for treatment, storage and reticulation operations plant and equipment in terms of achieving most effective and efficient delivery.

The review report also required to detail existing conditions and make recommendations for improvements in all areas covered by the review including:

- Standards, practices and procedures;
- Levels of service;
- Comparative cost effectiveness;
- Use of technology, information systems, plant and equipment;

- Quality systems; and
- Performance monitoring, and reporting.

REVIEW FINDINGS

A copy of the full review report prepared by AECOM is provided as an attachment to this report. The Conclusions and Recommendations section of the report contains the following general findings"

The review generally reflects that FRW is a commercially sound business unit of Council that delivers an appropriate level of service to the community, which is evidenced by:

- *Positive Economic Real rate of Return that is also higher than peer NQ/CQ peer Councils;*
- *Regular compliance with Customer Service Standards;*
- *Commendable disaster response in particular the aftermath of TC Marcia;*
- *Compares favourably in a high number of benchmarking parameters against national, state and NQ/CQ peer Council's;*
- *Very positive feedback from FRW staff through the staff survey relating to a range of measures, including asset management, safety, etc; and*
- *High community satisfaction as evidenced by comments from Councillors from their constituents as well as the annual customer surveys undertaken by RRC.*

In addition to the above general findings a list of specific recommendations were provided for actioning. These recommendations include items actions for FRW only as well as actions relevant to whole-of-Council. Broadly these specific recommendations can be categorised as follows:

- Service Delivery (Benchmarking, Performance)
- Capabilities and Resourcing (Staff Numbers, Staff Structure)
- Operational Processes (Safety, Technology, Asset Management)
- Capital Planning and Delivery
- Emergency Management
- Strategy and Governance

PROGRESS AGAINST RECOMMENDATIONS

Since the completion of the review report in September 2016, the following progress has been made in response to the recommendations provided in the review report.

Service Delivery

FRW continues to be a leading regional water service provider in benchmarking comparisons. The Queensland Urban Potable Water and Sewerage Benchmarking Report 2015/16 published after completion of the AECOM demonstrated the continued overall high standard of service delivery by FRW. The graph below compares FRW with 12 other large water service providers based on an unweighted scoring of the rank of each service provider for 16 separate Key Performance Indicators. The results of this benchmarking are summarised below and a copy of the full benchmarking report for 2015/16 is attached to this report.

With the 2016/17 reporting year now complete, FRW expects to achieve even better overall performance through continued improvement in key reporting metrics such as water mains breaks, real water losses and sewer overflows reported. A concerted effort will continue to be made to improve the performance in these and other reporting metrics that have not previously been as strong.

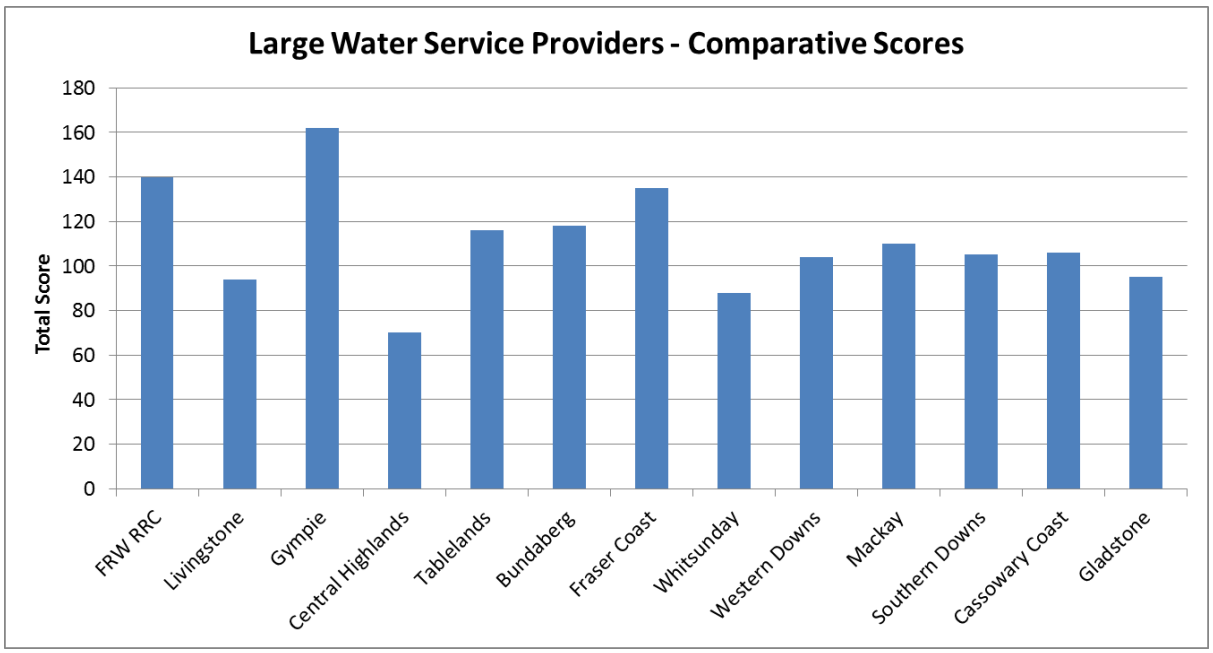


Figure 1. Comparison of the performance of large water service providers in Queensland based on a combined aggregate score of rankings for each of the 16 key reporting metrics listed in the table below.

Table 1. FRW's rank and derived score for each of the 16 key reporting metrics used for benchmarking against 12 other large water service providers in Queensland.

Key Performance Indicator	FRW	
	Rank	Score
Sewerage Capital Expenditure Per Property	7	7
Operating Cost Per Property - Sewerage	1	13
Typical Annual Residential Bill Sewerage	2	12
Typical Annual Residential Bill W&S	2	12
Economic Real Rate of Return - Sewerage	1	13
No. of W&S complaints Per 1000 Properties	8	6
Ave. Response-Reaction Time - Sewerage	8	6
No. Sewerage Breaks - Chokes Per 100km	11	3
No. Sewerage Overflows Reported Per 100 km	11	3
Water Capital Expenditure Per Property	1	13
Operating Cost Per Property - Water	5	9
Typical Annual Residential Bill Water	3	11
Economic Real Rate of Return - Water	3	11
Ave. Response-Reaction Time - Water	6	8
No. Water Main Breaks Per 100km main	10	4
Real Water Losses	5	9

Capabilities and Resourcing

In the second half of 2016, FRW was restructured to address a number of the resourcing or function gaps identified in the review report. The gaps that were addressed included an increase to the level of resourcing in the important Dispatch function as well as strengthening the areas of maintenance coordination and supervision of mechanical maintenance, asset management and business and project services.

This restructure was achieved in a cost-neutral manner by redesigning positions where appropriate. The changes to the FRW structure also sought to better align individuals within FRW to ensure more effective delivery of capital projects. FRW is now better positioned to have a greater capability to deliver a high standard of water and sewerage services whilst also delivering against a significant program of asset renewals and upgrades as outlined in FRW's asset management plans.

Operational Processes

A number of recommendations focused on targeting further improvements in FRW's approach to safety management, use of technology and asset management. In general, these three specific areas can be considered as true whole-of-Council processes that FRW shares along with other sections.

Since the completion of the FRW review, significant progress has been made by Council to achieve improved outcomes in safety as demonstrated by an improved score in a Council safety audit completed in the last 12 months. Much of the focus going forward is directed at continuing to improve the overall safety culture within the organisation towards reducing the frequency and severity of workplace incidents and injuries. There remains significant room for improvement in this area although in general virtually all safety metrics for FRW have shown significant improvement in the last 12-18 months.

The use of technology and the approach to asset management in Council both continue to be key topics for further development and investment. A number of projects are currently under development to improve in each of these areas, although much of this improvement depends on securing business software systems that provide the required capability and functionality. Currently, FRW is an active participant in a project to identify and procure a new asset management system for the whole of Council with a key emphasis being placed on the ability of this system to incorporate technological enhancements such as field-based devices or tablets for increased efficiency and productivity. This project will extend into 2017/18 prior to a final decision being made on the new system.

Capital Planning and Delivery

As above, the processes that are applied to ensure effective planning and delivery of capital programs are generally whole-of-Council processes. However, since the completion of the review, FRW has identified some improvement actions to add value to the Asset Management Plans to better describe some of the specific approaches and strategies used to plan future capital investments so that they are all contained in the one document. In addition, the establishment of a Capital Project Review Committee within Council has helped to demonstrate some of the rigor that already exists in the capital planning processes.

A number of the changes made to the FRW structure have significantly improved the ability to deliver capital projects in timely and cost-effective manner and although a number of these changes were only made part way through 2016/17, the benefit of these changes for capital project delivery is already evident.

Emergency Management

A recommendation of the report was to update and finalise an Emergency Response Plan for FRW. Since this recommendation and in line with advice from the Department of Energy and Water Supply (DEWS) and key internal Disaster Management personnel, FRW has instead commenced the commenced the completion of a Business Continuity Plan which encompasses all the relevant information and actions for FRW to ensure continuity of water and sewerage services.

All specific information for emergency management and emergency response information is best placed being included in Disaster Management Plans and Sub-Plans. As indicated above, this approach is consistent with advice received from DEWS for the management of Dam Safety Emergency Events and is consistent with the current standard approach used by the Local Disaster Management Group.

Strategy and Governance

FRW has commenced the development of a Strategic Plan to define the strategic direction for its activities. This brief but concise Plan will be finalised in the second half of 2017. Other recommendations including some review of the existing business model and governance arrangements are being considered and discussed internally to assess the merits of any changes to these aspects of FRW. Given the current strong financial and operational performance as evidenced by the statewide benchmarking report comparisons, there does not currently appear to be a strong motive to change the existing governance arrangements. Instead, FRW has chosen to implement a Continuous Improvement approach in line with Council's new values to ensure that areas of lesser performance are improved to meet internal and external expectations.

CONCLUSION

Overall the review of FRW's operations has provided a very useful analysis of FRW's current strengths and also the opportunities for FRW to further improve its performance as a water service provider. In general the finding made by AECOM *'that FRW is a commercially sound business unit of Council that delivers an appropriate level of service to the community'* reflects the generally favourable detailed findings throughout the review report.

FITZROY RIVER WATER OPERATIONAL REVIEW

Fitzroy River Water Operational Review Report

Meeting Date: 18 July 2017

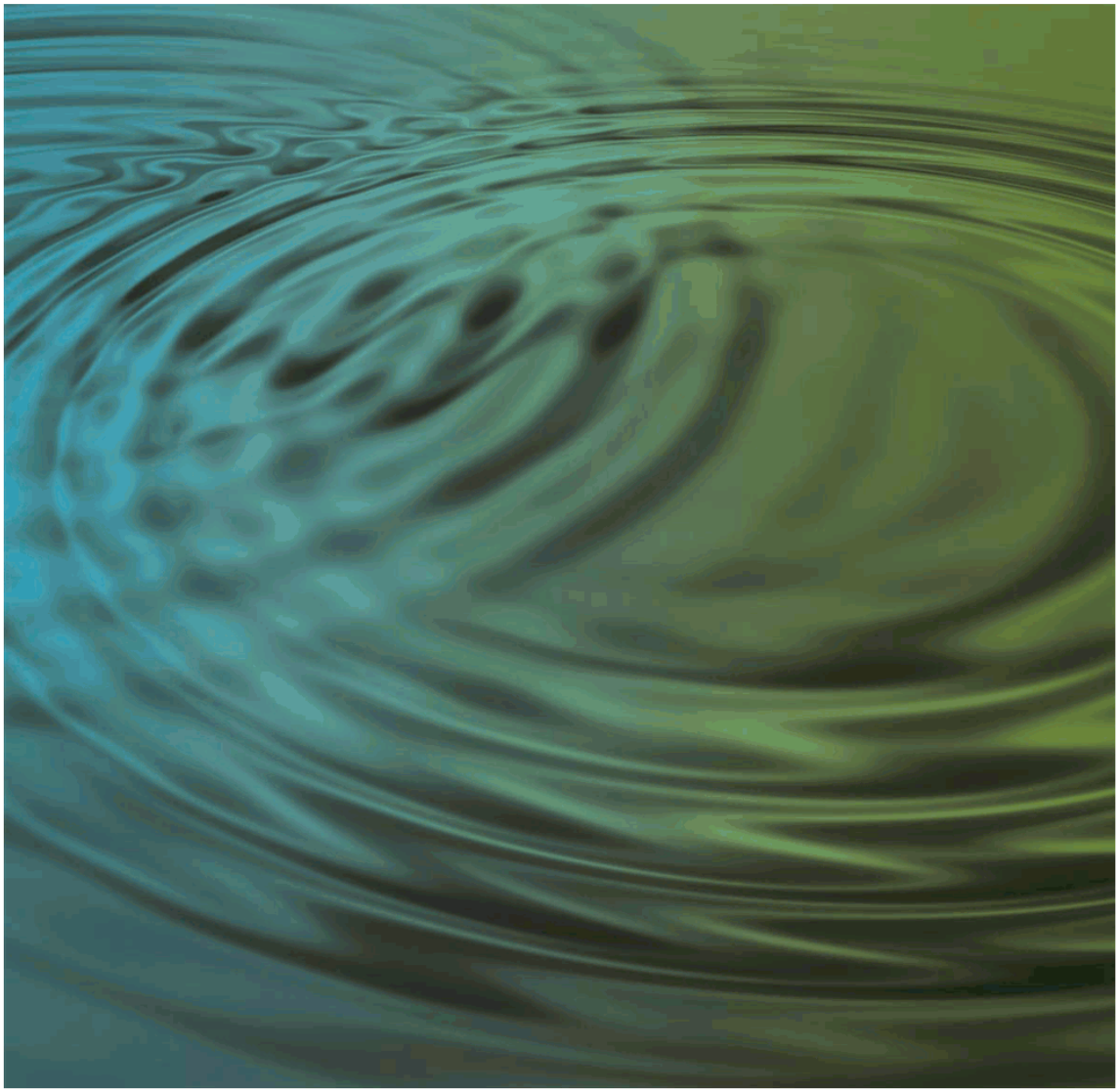
Attachment No: 1

AECOM

Rockhampton Regional Council
20-Sep-2016

Fitzroy River Water Operational Review

Report



Fitzroy River Water Operational Review

Report

Client: Rockhampton Regional Council

ABN: 59 923 523 766

Prepared by

AECOM Australia Pty Ltd
Level 1, 130 Victoria Parade, PO Box 1049, Rockhampton QLD 4700, Australia
T +61 7 4927 5541 F +61 7 4927 1333 www.aecom.com
ABN 20 093 846 925

20-Sep-2016

Job No.: 60480720

AECOM in Australia and New Zealand is certified to the latest version of ISO9001, ISO14001, AS/NZS4801 and OHSAS18001.

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

Quality Information

Document Fitzroy River Water Operational Review

Ref 60480720

Date 20-Sep-2016

Prepared by Shaun Cox / Michael Puntil / Abby Carolan

Reviewed by Ben McMaster

Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
1	6-Jul -2016	DRAFT		
2	19-Jul-2016	DRAFT following RRC / FRW comment		
3	20-Sep-2016	FINAL	Michael Puntil Associate Director – Water	

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

Table of Contents

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

Executive Summary

AECOM Australia Pty Ltd, in partnership with Inxure Strategy Group, was engaged by Rockhampton Regional Council (RRC) to undertake an operational review of RRC's commercial business unit, Fitzroy River Water (FRW). FRW is responsible for the operation and maintenance of approximately $828.17M in water and sewerage assets that enable the storage and supply of raw water, treatment and distribution of potable water, collection and treatment of sewage and discharge of treated effluent.

In order to effectively complete the review and provide the most value to RRC and FRW, a consultative approach to the review methodology was followed which involved:

- gathering and review of relevant information;
- interviews with sixteen (16) key RRC and FRW staff;
- survey of all FRW and relevant RRC staff (providing shared services to FRW);
- three (3) formal workshops where held as well as a presentation to the Airport, Water and Waste Committee;
- a resource / function gap analysis to identify resource, functional and capabilities gaps against the current structure completed together with the FRW management team; and
- a maturity level assessment of FRW's asset management systems against the International Infrastructure Management Manual (IIMM).

At the outset of the project, RRC nominated that the following are the required outcomes for the Review:

1. the Councils' water and sewerage services practices and procedures compare to nationally recognised best practice and industry standards;
2. the current treatment, storage and reticulation standards and service levels and practices are appropriate;
3. the Councils' performance in achieving their required services levels is acceptable;
4. the Councils' use of supporting information systems, technologies and equipment is optimised;
5. appropriate quality assurance processes are in place and in use;
6. works and services are undertaken in the most effective and efficient manner;
7. the Councils' staff, and their contractors have the skills and capabilities necessary to undertake the work; and
8. the optimum organisational structure for FRW to achieve 'upper quartile' industry standards..

These required outcomes are addressed below.

Comparison to Best Practice and Industry Standards

A comprehensive benchmarking assessment was undertaken as part of the review, utilising both Queensland and National performance reporting data. The Benchmarking review found that FRW compared favourably with national, state and regional water authorities in terms of the following (for both Water and Sewerage services):

- Capital Expenditure ($/property);
- Operating Cost ($/property);
- Typical Residential Bill ($);
- Economic Real Rate of Return (%).

Of the benchmark parameters reviewed, it was found that FRW may be able to improve performance in the following when compared to national, state and water regional authorities:

- Number of sewerage main breaks and chokes per 100 km of sewer main;
- No. of sewage overflows reported (per 100 km sewer main);
- Number of water main breaks per 100 km of water main;

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

- Real water losses (litres/service connection/day);
- No. of water & sewerage complaints (per 1,000 connections).

Appropriateness of Service Standards

In the proceeding section, it was identified that there were five main parameters that may be improved so that FRW is in line with regional, state and national water authorities. Of these five parameters, it is noted that the following four (4) are currently listed in FRW's Customer Service Standards:

- Number of sewerage main breaks and chokes per 100 km of sewer main;
- No. of sewage overflows reported (per 100 km sewer main);
- Number of water main breaks per 100 km of water main;
- Real water losses (litres/service connection/day).

In general terms, FRW meets the levels prescribed in the Customer Service Standards for these parameters but it is recommended that the Customer Service Levels for these parameters are revised in order to bring them closer to other national, state and water regional authorities. It is also recommended that FRW considers nominating the parameter "No. of water & sewerage complaints (per 1,000 connections)" in the next review of its Customer Service Standards.

It is worth mentioning that there may be additional benefits in nominating (and achieving) tighter Customer Service Standards targets including improved system performance, cost savings (through reduced losses of treated water), potential to push back capital infrastructure, etc.

Performance in Achieving Service Levels

Through the benchmarking exercise, it was found that FRW met its service obligations as prescribed in the Customer Service Standards.

This was further substantiated by:

- High community satisfaction as evidenced by comments from Councillors from their constituents as well as the annual customer surveys undertaken by RRC; and
- Positive feedback from FRW staff through the staff survey.

As nominated previously, it is recommended that FRW considers further tightening and/or establishing new targets in the Customer Service Standards in order to deliver services better aligned to industry standards in a small subset of parameters. It is noted that by implementing this recommendation, there is a risk that other parameters may be affected adversely if considered in isolation (i.e. increasing operational costs).

Use of Supporting Services/Technologies

Currently part or all of the following key functions are undertaken for FRW by other parts of Council:

- Asset Management;
- Infrastructure Planning;
- Input to Development planning and management.

The amalgamation and subsequent de-amalgamation has driven considerable change (operational and structural) within the Council. The de-amalgamation triggered a necessary focus on RRC's financial health. This impacted organisational capability right across Council and has continued to drive a strong centralised "Shared Services" model for Council.

As such, it is recommended that FRW embraces the Shared Services model and in order to do so consider amending its Organisational Structure to promote accountability for the purchasing of the "Shared Services".

Although FRW staff provided positive feedback that FRW was utilising technology well, it was found that there is scope within the organisation for the better use of technology in an operational sense. It is therefore recommended that FRW considers identifying a resource responsible for assessing and delivering innovation and business improvement for FRW.

Quality Assurance Systems

FRW has a number of regulatory drivers that they are required to fulfil in the delivery of water and sewerage services to the community as follows:

- Customer Service Standards;
- Drinking Water Quality; and
- Compliance with Environmental Authorities relating to STP discharge.

It was observed that FRW are currently meeting their obligations in terms of these drivers.

On this basis, as these items are specifically nominated in a regulatory environment, it is believed that there is little benefit of including these items in a Quality Management System.

With respect to project delivery, shortfalls in quality management and consistency, surrounding the delivery of capital projects, were observed. FRW staff has also indicated that there is currently limited quality control undertaken for construction works completed internally. It is noted that the development of a Quality Management System (perhaps on a Council wide basis) is a key recommendation.

Effective Delivery of Services

As evidenced through Councillor feedback, staff surveys and peer benchmarking, the review reflects that FRW is a commercially sound business unit of Council that delivers an appropriate level of service to the Community. Of particular note is that FRW performs very strongly in terms of Economic Real Rate of Return which demonstrates that FRW provides a return on capital.

Capabilities Assessment

A gap analysis against key business roles / outputs was undertaken based on FRW's current staff and operational structure. This analysis was developed with FRW's management team and identified the observed gaps in resourcing and function, key risks if these gaps are not addressed and recommendations resolving these gaps and attenuating risk. Key recommendations include:

- Incorporate a dedicated resource to assess/deliver innovation and business improvement opportunities;
- Ensure adequate resources are allocated to delivery of asset management (albeit working with the corporate Asset Management section), capital planning and forward/major maintenance planning;
- Determine how best to utilise and support the current Network Model Resource; and
- A formalised process for Succession Planning and talent identification should be developed.

Optimum Organisational Structure

It was observed that FRW is currently structured and resourced to manage the business at an inputs level (i.e. primarily operations and maintenance and capital delivery activities) which is currently delivering the required level of service.

The review found that there is merit in amending the organisational structure to be based on a grouping of outputs which may provide a number of advantages including reduction of inconsistencies of approach, efficient and effective interactions with internal shared services and separation of tasks based on different planning horizons. The amended organisational structure would also enable FRW to take on greater accountability in terms of asset management and planning, commercial performance, technology, innovation and people management.

It is recommended that FRW is restructured along the following lines (with FRW and Council management best placed to determine a detailed structure.

Asset Management and Planning	Operation / System Control	Maintenance	Capital Delivery	Business Support
• Asset Custodianship for FRW • AM Plans • Forward Capital Planning (20 years) • Forward Maintenance Planning • Data Inegrity • Network Model	• Operations (Treatment and Networks) • SCADA • Water Quality • Trade Waste • Emergency Management	• Reactive / Minor Scheduled Maintenance • Mech Elect • Civil • General Facilities • Dispatch / Maintenance Planning	• Construction • Major / Complex Maintenance • Project / Contract Management • Private Works	• Commercial Performance and Business Development • People Management • Technology • Innovation • Meter Reading • Adminstration

Consistent with the recommendation for FRW to take greater accountability for its business outcomes, it is strongly recommended the business unit be retained as one entity and continues to report directly to the General Manager – Regional Services.

High Priority Recommendations

In order to fulfil the commitment of Councillors and Senior staff that FRW is a leading regional water authority, a number of Action Plans have been recommended across a number of different categories with a timeline for completion. In addition to these Recommended Action Plans, a number of discrete benchmarking tasks have been developed that enable Council to track completion of the Action Plans.

Of the 44 broad actions, the following have been identified as the high priority for FRW/RRC to implement within the next 6-12 months:

No.	Review Section	Recommended Action
03	Capabilities / Resources Assessment - People Management	FRW be considered a high priority as part of the role out of Succession and Talent Management plans for the whole of Council.
04	Capabilities / Resources Assessment - Resources	Review and address resourcing gaps in the current and new organisational structure of FRW.
28	Operational Processes - Capital Planning and Delivery	Develop a detailed Capital Project Delivery resourcing plan for the next 5 years incorporating internal and external resources
34	Operational Processes - Capital Planning and Delivery	Integrate formalised project closure and review procedures into medium to high risk projects.
35	Operational Processes - Emergency Management	Revise, finalise and implement an Emergency Response Plan
38	Organisational - Operating Model	That the FRW structure be realigned based on grouping of outputs to help enable FRW to be accountable key activities relating to being a water supply and sewerage business activity

Summary

In summary, the review generally reflects that FRW is a commercially sound business unit of Council that delivers an appropriate level of service to the community.

In order for FRW to fulfil its commitment of developing into a leading regional water authority the Recommended Action Plans should be implemented and progress tracked against identified benchmarking tasks.

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

1.0 Introduction

1.1 General

AECOM Australia Pty Ltd, in partnership with Inxure Strategy Group, was engaged by Rockhampton Regional Council (RRC) to undertake an operational review of RRC's commercial business unit, Fitzroy River Water (FRW). The purpose of this report is to detail the findings of the review and provides recommendations for improvements in the following areas:

- Standards, practices and procedures;
- Levels of service;
- Comparative cost effectiveness;
- Use of technology, information systems, plant and equipment;
- Quality systems; and
- Performance monitoring and reporting.

1.2 Background

FRW is responsible for the operation and maintenance of water and sewerage assets totalling approximately $828.17M.

General functions of these assets include:

- the storage and supply of raw water for urban, commercial and agricultural purposes;
- treatment and distribution of potable water for urban and industrial use;
- collection and treatment of sewage; and
- discharge of treated effluent.

FRW delivers all services relating to water and sewerage on behalf of Council in accordance with the parameters outlined within its annual Performance Plan, relevant mandatory and non-mandatory regulatory plans and other documents as set by Council.

FRW's responsibility is to enhance the community's quality of life by providing sustainable water and sewerage services, through innovation, technical expertise, business efficiency, excellence in customer service and commitment to the environment.

The key objectives of FRW are to deliver commercially viable water and sewerage services that satisfy adopted customer service standards.

- FRW is required to, in conducting the activities on behalf of the Council:
- provide high-quality, safe, reliable and cost-effective water and sewerage services;
- operate in an efficient and financially sustainable manner and provide the Council with an appropriate rate of return;
- responsibly manage, improve and augment infrastructure;
- be responsive to customer needs;
- meet performance targets;
- optimise costs;
- protect the environment, encourage water conservation and effluent re-use; and
- undertake other commercial activities with a profit motive.

Council as the owner of FRW, is responsible for approving the strategic direction and broad policies for the Business Unit. Council is responsible for providing a number of support services to FRW including:

- Corporate governance support;
- Corporate business systems;
- Financial support services;
- Safety support services and systems;
- Human resource services and systems;
- IT services support and systems;
- Records management support and systems;
- Collection of revenue and infrastructure charges;
- Supply of fleet and plant; and
- Other miscellaneous support services (payroll, etc).

Under the existing Service Level Agreements (SLA), preference is generally given to the use of internal support services over external service providers.

1.3 Council Required Outcomes Review Objectives

Council's required outcomes for the FRW Operational Review, as outlined in the project brief have been addressed in the following sections:

Outcome	Address
1. the Councils' water and sewerage services practices and procedures compare to nationally recognised best practice and industry standards;	Section 2.0
2. the current treatment, storage and reticulation standards and service levels and practices are appropriate;	Section 2.0
3. the Councils' performance in achieving their required services levels is acceptable;	Section 2.0
4. the Councils' use of supporting information systems, technologies and equipment is optimised;	Section 4.2
5. appropriate quality assurance processes are in place and in use;	Sections 4.3, 4.5 and Appendix D
6. works and services are undertaken in the most effective and efficient manner;	Section 4.0
7. the Councils' staff, and their contractors have the skills and capabilities necessary to undertake the work; and	Section 3.1
8. the optimum organisational structure for FRW to achieve 'upper quartile' industry standards.	Section 5.2

1.4 Review Methodology

A consultative approach to the review methodology was followed as per the figure below:

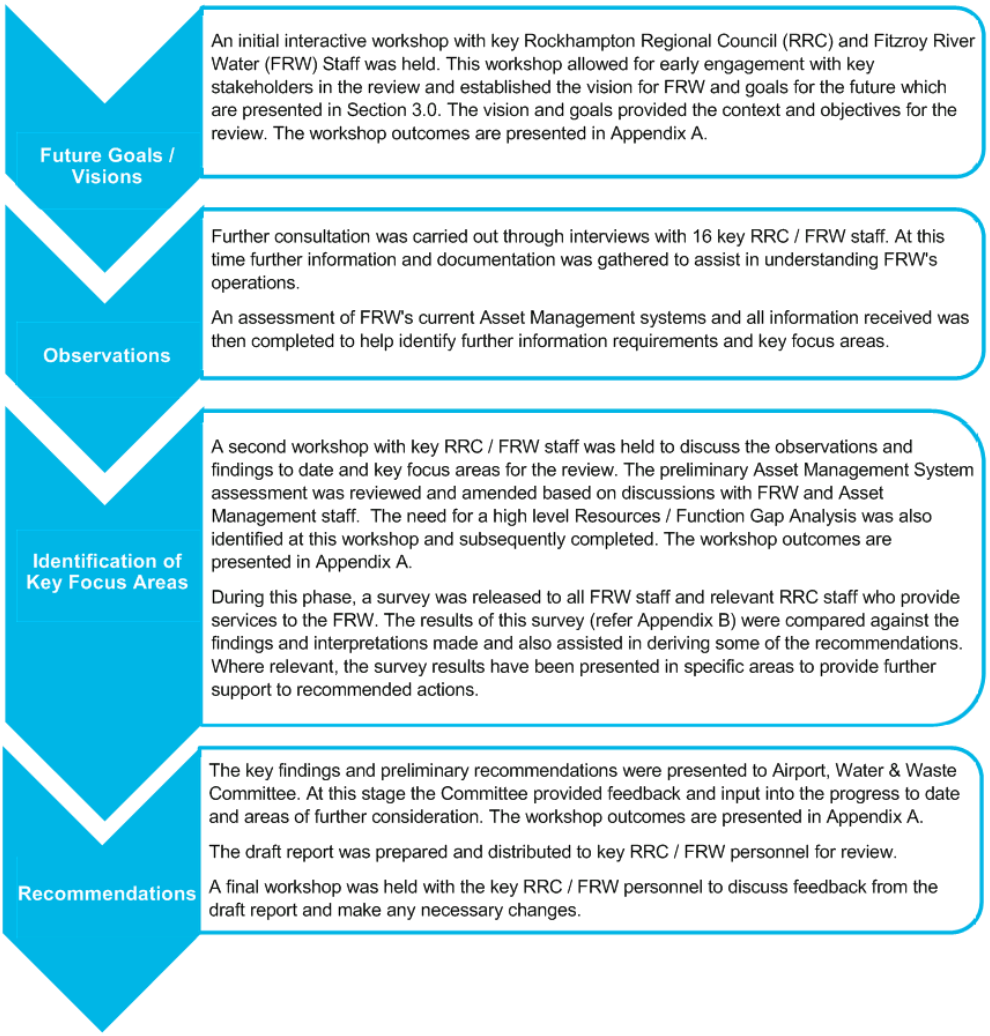


Figure 1 FRW Operational Review Methodology

1.5 Future Challenges and Opportunities

Identifying the more significant future challenges and opportunities for FRW is an important consideration for how it should be organised and managed going forward. Through the interview process across a wide range of Council stakeholders, the following challenges and opportunities were identified for FRW:

- Meeting the growing needs of the region with effective and efficient water supply and sewerage services. It is noted that significant capacity issues are currently being worked through such as servicing the growth precincts of Gracemere & North East Parkhurst.
- Managing the aging assets. It is noted that considerable investment has been made in the following areas over the last five years:
  - water main renewals;
  - sewer main relining and sewer manhole / well refurbishment to help address ongoing issues with infiltration and resulting wet weather overflows; and
  - capacity and treatment standard upgrades at Wastewater Treatment Plants.
- Regional water supply security. Indications are that the immediate water security is sound, with the Fitzroy River providing a reliable source of supply. Into the future there will be competing demands for that water from urban, agricultural and industrial users.
- Climate variability. As noted in the above point, this will impact water security (compromised water availability and greater demand), but is likely to affect FRW's activities in other ways such as:
  - Accelerating corrosion of sewer assets;
  - Increasing the size and frequency of flood events and thus increasing wet weather overflows from sewers and flooding of FRW's assets;
  - More severe and frequent hot days, impacting mechanical and electrical equipment and staff operating and maintaining the network;
  - Potential sea level rise, thus impacting the barrage and the quality of the region's source water upstream of that structure.
- An ageing workforce and inadequate succession planning and development of the next generation of talent to run FRW.
- The desire to put in place a more robust risk based forward capital program.
- The opportunity to improve operations and planning through a more robust GIS and improved as-constructed information.
- The opportunity to improve productivity and customer service outcomes through greater up take of technology and improved information management.
- Funding and resourcing constraints impacting the ability to address the above mentioned future challenges.

2.0 Service Delivery Review

2.1 Benchmarking

2.1.1 Observations

Through the National Water Initiative (NWI), States and Territories provided commitments to report publicly and independently on the performance of water utilities. Through the commitment to NWI, Fitzroy River Water currently participate in two disparate but similar performance reporting frameworks, as follows:

Reporting Framework	Author	No. of Participants
Queensland's Urban Potable Water and Sewerage Benchmarking Report	***qldwater***	58
National Performance Report (NPR)	Bureau of Meteorology (BoM)	87 (22 from Queensland)

In order to benchmark FRW's performance, the 2014-15 reports produced by ***qldwater*** and BoM were utilised and the following table demonstrates the parameters used as comparisons:

Parameters for Comparison	Source of Information	Other Comments
Queensland Median	***qldwater*** 2014/15 Report	Nil
National Median	BoM NPR 2014/15 Report	Nil
National (20,000-50,000 connections) Median	BoM NPR 2014/15 Report	RRC/FRW falls into this sizing group. There are 22 utilities in this group, 6 of these are from Queensland.
Regional Queensland Peer (Bundaberg, Mackay and Gladstone) Average	BoM NPR 2014/15 Report	This is a derived parameter to compare RRC/FRW against similar sized regional QLD local authorities.

Generally, the parameters reported in the ***qldwater*** 2014/15 Report were utilised to undertake the benchmarking activity with some additions/deletions as noted below:

- Deletions:
  - (Average) Response/reaction time for incidents (sewerage) (min). This benchmark was removed as there was no similar measure undertaken for the BoM NPR so comparison nationally was not possible.
- Additions:
  - Typical Residential Bill – Water & Sewerage ($);
  - Combined operating cost: water and sewerage ($/property).

The table and graphs below provides a summary of the benchmarking review undertaken.

Table 1 Water and Sewerage Services Benchmark Comparisons (2014/15)

Parameter	FRW	Qld Median	NWI Median	NWI (20,000 – 50,000) Median	Regional Qld Peers Average
Sewerage					
Sewerage Capital Expenditure ($/property)	227	193	215	205	428
Operating Cost – Sewerage ($/property)	308	434	400	424	677
Typical Residential Bill – Sewerage ($)	558	664	667	726	648
Economic Real Rate of Return – Sewerage (%)	7.1	4.7	3	3	2.9
Number of sewerage main breaks and chokes per 100 km of sewer main	24.4	9.1	20.8	13.4	6.7
No. of sewage overflows reported (per 100 km sewer main)	1.7	0.54	0.5	0.6	3.2
Potable Water					
Water supply capital expenditure ($/property)	292	158	162	168	219
Operating costs – Water ($/property)	395	631	451	398	787
Typical residential bill – Water ($)	578	762	589	582	835
Economic Real Rate of Return – Water (%)	5.2	4.4	2	2	3.2
Number of water main breaks per 100 km of water main	12.9	14.1	12.7	9.5	52
Real water losses (litres/service connection/day)	180	84	72.5	70	339
Combined – Water and Sewerage					
Typical Residential Bill – Water & Sewerage ($)	1136	1369	1299	1310	1484
No. of water & sewerage complaints (per 1,000 connections)	51	8	4.3	6.7	11
Combined operating cost: water and sewerage ($/property)	703	1065	850	850	1465

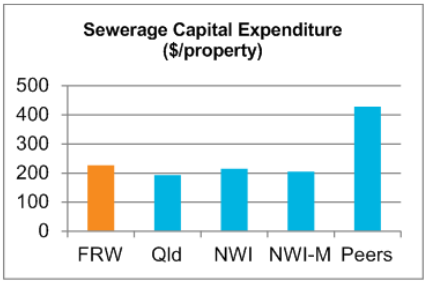


Figure 2 Sewerage Capital Expenditure Benchmark Graph

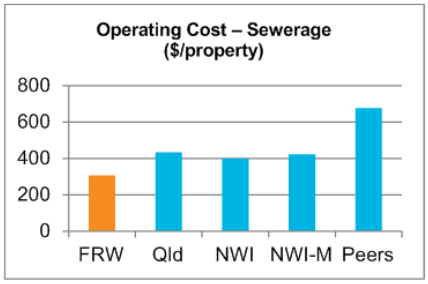


Figure 3 Operating Cost – Sewerage Benchmark Graph

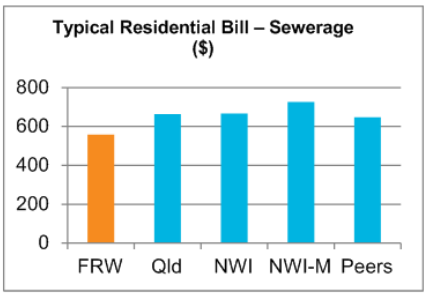


Figure 4 Residential Bill Sewerage Benchmark Graph

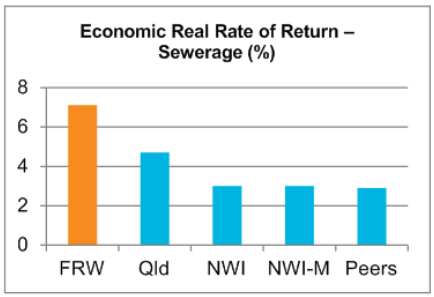


Figure 5 ERRR – Sewerage Benchmark Graph

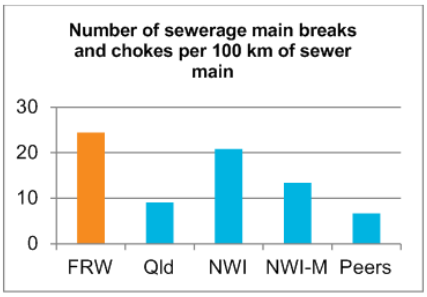


Figure 6 Sewerage Main Breaks benchmark Graph

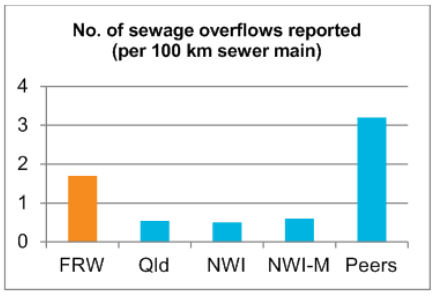


Figure 7 Sewage overflows benchmark Graph

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

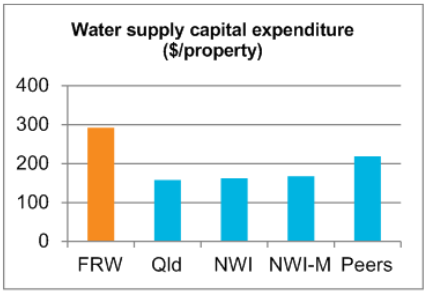


Figure 8 Water Capital Expenditure benchmark Graph

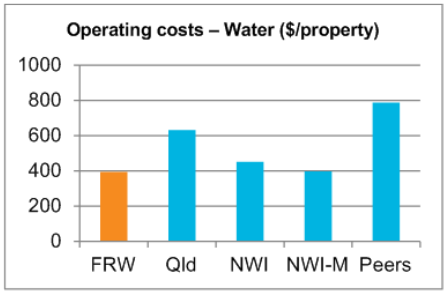


Figure 9 Water Operating Costs Benchmark Graph

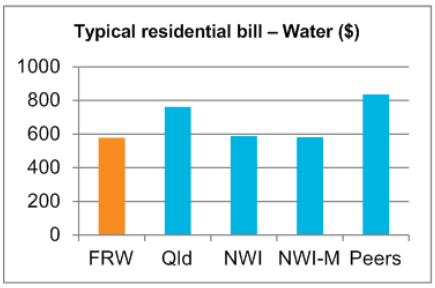


Figure 10 Water Residential bill benchmark Graph

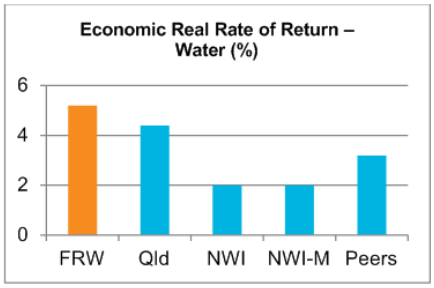


Figure 11 ERRR – Water benchmark Graph

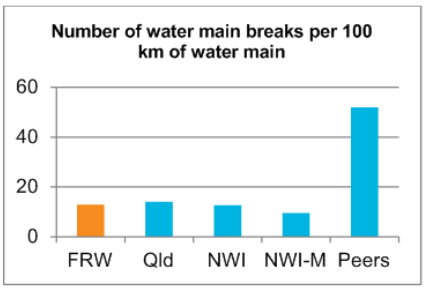


Figure 12 Water Main Breaks benchmark Graph

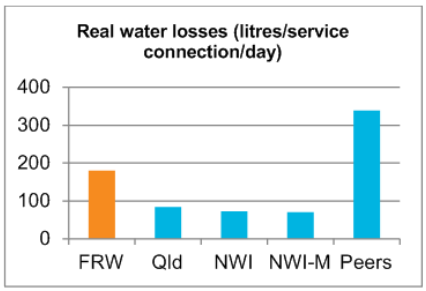


Figure 13 Real Water Losses Benchmark Graph

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

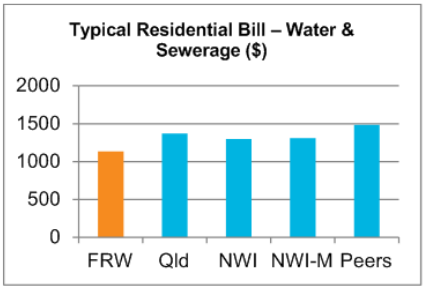


Figure 14 Water and Sewerage Residential Bill benchmark Graph

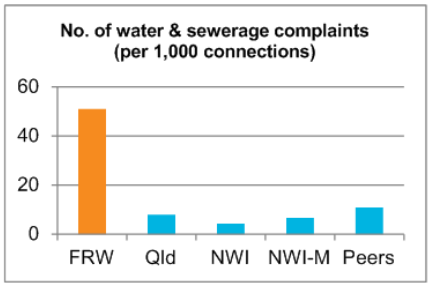


Figure 15 Water & Sewerage Complaints Benchmark Graph

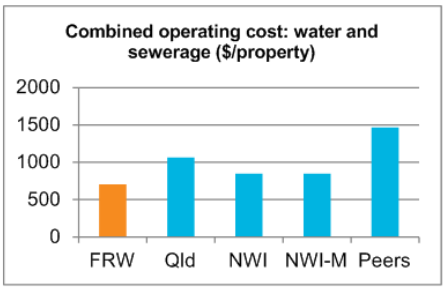


Figure 16 Water and Sewerage operating Costs benchmark Graph

From the above table and graphs, FRW performs strongly against its peers in terms of:

- Sewerage Capital Expenditure ($/property);
- Operating Cost – Sewerage ($/property);
- Typical Residential Bill – Sewerage ($);
- Economic Real Rate of Return – Sewerage (%);
- Water supply capital expenditure ($/property);
- Operating costs – Water ($/property);
- Typical residential bill – Water ($);
- Economic Real Rate of Return – Water (%);
- Typical Residential Bill – Water & Sewerage ($);
- Combined operating cost: water and sewerage ($/property).

Of particular importance is that RRC/FRW performs very strongly in terms of the Economic Real Rate of Return (ERRR) for both the water and sewerage operations. The ERRR is a measurement of financial performance and is calculated using the following formula:

$$ERRR = \frac{Revenue - Operating\ Expenses}{Written\ Down\ Replacement\ Cost}$$

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

The ***qldwater*** 2014/15 Report indicates that an appropriate value for ERRR is difficult to nominate but it should be at least positive with a margin to allow for a return on capital.

It is worth noting that RRC/FRW has reported positive ERRR values for the past 7 years (as per the table below), indicating a sustained period of positive financial performance for the water and sewerage operating businesses.

Table 2 FRW ERRR Values (from NPR 2014/15 Part B)

Indicator Name	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Economic real rate of return - water (ratio)	2.4	4.2	3.4	3.8	4	6.7	5.2
Economic real rate of return - sewerage (ratio)	5.5	3.9	5.3	4.7	5.8	8.8	7.1
Economic real rate of return - water and sewerage (ratio)	3.4	4.1	4.1	4.1	4.6	7.4	5.8

Through the benchmarking process, RRC/FRW reported that they are generally below the reported industry standard for the following parameters:

- Number of sewerage main breaks and chokes per 100 km of sewer main;
- No. of sewage overflows reported (per 100 km sewer main);
- Number of water main breaks per 100 km of water main;
- Real water losses (litres/service connection/day);
- No. of water & sewerage complaints (per 1,000 connections).

To put this into context, an assessment of these parameters has been undertaken against FRW's Customer Service Standards and those of other similar sized entities.

Table 3 Benchmark Comparison to Customer Service Standards

Parameter	RRC/FRW Reported Values							Customer Service Standards			
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Average	RRC	MRC	BRC	GRC
Number of sewerage main breaks and chokes per 100 km of sewer main	39.6	94.5	70.5	70.3	12.1	24.4	51.9	< 50	< 30	< 30	< 40
No. of sewage overflows reported (per 100 km sewer main)	10.9	5.9	6.1	3.8	3.3	1.7	5.3	< 30	< 10	< 15	< 30
Number of water main breaks per 100 km of water main	20.7	11.5	14.2	18.7	24.9	12.9	17.2	< 40	< 40	< 20	< 30
Real water losses (litres/service connection/day)	67	219	145	185	227.7	180	170.6	< 200	NR	NR	< 140
No. of water & sewerage complaints (per 1,000 connections)	29.1	94.1	38.8	61.9	56	51	55.2	NR	NR	< 60	NR

Legend:

- MRC – Mackay Regional Council
- BRC – Bundaberg Regional Council
- GRC – Gladstone Regional Council
- NR – Not Reported

2.1.2 Improvement Opportunities

As per the previous discussion, of the 15 benchmarks assessed, FRW currently compares very favourably with other organisations in 10 of these benchmarks. In particular, FRW outperforms the CQ counterparts of Gladstone, Bundaberg and Mackay in most parameters.

Of the other five benchmarks, it is noted that although FRW's values are generally within the FRW Customer Service Standard nominated, they fall below state and national median values. It is therefore recommended that FRW considers tightening of their Customer Service Standards for the following parameters so that they are at least consistent with the peer group in CQ. It is acknowledged that by simply tightening the Customer Service Standard would not alone directly relate to performance improvements and it may require investment in terms of preventative maintenance/capital works to achieve the tighter performance standards. It is considered that this investment is not "new" investment as Council will transfer costs from reactive to preventative maintenance.

The following table presents a list of benefits to Council should improvements occur to the nominated benchmarks:

Benchmark	Proposed Target	Benefits for Improvement
Number of sewerage main breaks and chokes per 100 km of sewer main	< 15	- Improved system performance - Reduction in overflows
No. of sewage overflows reported (per 100 km sewer main)	< 10	- Minimises environmental impacts (community perception)
Number of water main breaks per 100 km of water main	< 18	- Minimises loss of treated water i.e. cost savings
Real water losses (litres/service connection/day)	< 100	- Minimises loss of treated water i.e. cost savings - Potential to push back capital infrastructure
No. of water & sewerage complaints (per 1,000 connections)	< 10	- Ratepayer satisfaction - Signifies improvements in overall system performance

2.1.3 Recommended Action Plan

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
01	1. Maintain (or continue to improve performance) current high level performance in the following Benchmark Parameters: • Sewerage Capital Expenditure ($/property) • Operating Cost – Sewerage ($/property) • Typical Residential Bill – Sewerage ($) • Economic Real Rate of Return – Sewerage (%) • Water supply capital expenditure ($/property) • Operating costs – Water ($/property) • Typical residential bill – Water ($) • Economic Real Rate of Return – Water (%) • Typical Residential Bill – Water	L	18 months	1. Consider overall cost benefits to FRW for improvement in Benchmark Reporting; 2. Update Customer Service Standards with more Stringent targets; 3. Continue participation in benchmarking assessment; and 4. Undertake review of benchmark performance against peer groups (nationally and state-wide.

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
	& Sewerage ($) • Combined operating cost: water and sewerage ($/property) 2. Improve performance in the following benchmark parameters: • Number of sewerage main breaks and chokes per 100 km of sewer main • No. of sewage overflows reported (per 100 km sewer main) • Number of water main breaks per 100 km of water main • Real water losses (litres/service connection/day) • No. of water & sewerage complaints (per 1,000 connections)			

2.2 Water Quality / Compliance

2.2.1 Observations

As a registered service provider, in accordance with *Water Supply (Safety and Reliability) Act 2008,* FRW must prepare a Drinking Water Quality Management Plan (DWQMP) that addresses the storage, treatment, transmission or reticulation of water for drinking. The Act also prescribes that the DWQMP must be:

- Approved by the regulator (currently the Department of Energy and Water Supply(DEWS));
- Updated on an annual basis; and
- Periodically reviewed by an independent evaluator.

It is noted that FRW has an approved DWQMP and has submitted the 2014/15 annual report. An independent evaluation of the DWQMP was completed for the 2013/14 (as reported in NPR Part B 2014/15) and FRW has advised that a recent independent evaluation was completed in April 2016.

A review of the Drinking Water Quality Management Plan (DWQMP) Report (for the period 1st July 2014 to 30 June 2015) was undertaken and it was noted that FRW reported five non-compliances/prescribed incidents with water quality criteria. The incident description and the corrective and preventative actions were then assessed against the Risk Assessment detailed in FRW's DWQMP (October 2014). The purpose of this comparison is to establish whether the risks relating to the non-compliances/prescribed incidents have been previously assessed by Council. This comparison is presented in the following table.

Table 4 Comparison of 2014/15 Non-Compliances to DWQMP Risk Assessment

2014/15 Non-Compliance/Prescribed Incidents	Reference to DWQMP Risk Assessment (Oct 2014)
Chlorine (free) exceeding water quality criteria in supply reservoir samples	Item R32 in Section 5.
Manganese exceeding water quality criteria following TC Marcia	Item R06 in Section 5.
THM exceeding water quality criteria following TC Marcia	Item R28 in Section 5.
Reticulation sample tested positive for *E. coli*	Item MM26 in Section 5.
Cyanobacteria bloom and cylindospermopsin detected in the source water	Item R03 & R12 in Section 5.

As reported by FRW, a number of water quality non-compliances were attributed to TC Marcia. FRW also reported that the majority of water quality complaints occurred in the months after TC Marcia made landfall i.e. March and April 2015. It is noted that FRW reported an increase of water quality complaints from the 2014/15 compared to previous years as follows:

Table 5 Water quality complaints (per 1000 properties), NPR Part B 2014/15

2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
3.4	6.1	5.9	6.1	2.1	9

2.2.2 Improvement Opportunities

As per Table 4, all of the 5 non-compliances were nominated by FRW as a known hazard, however as the incidents still occurred it is recommended that the preventive measures/barriers are reviewed for its suitability and amended as required.

Furthermore, the Hazard/Risk Assessment should be reviewed to consider the incidents caused by TC Marcia that increased the number of water quality complaints from customers.

Table 6 Action Plan – Water Quality

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
02	Revise Hazard / Risk Assessment in DWQMP	M	12 months	1. Re-convene Risk Assessment Workshop with key staff 2. Amend mitigation measures in order to further reduce risk of occurrence of non-compliances/prescribed incidences reported in 2014/15 3. Consider revising Hazard Assessment to cover incidences/water quality complaints that occurred following TC Marcia

2.3 Treated Sewage Effluent Discharge

2.3.1 Observations

FRW currently own, operate and maintain five sewage treatment plants as follows:

Plant Name	Population Served	Discharge Method
Gracemere Sewage Treatment Plant (STP)	8,000 EP	Land Irrigation
Mt Morgan STP	650 EP	Land Irrigation
Nth Rockhampton STP	42,000 EP	Fitzroy River
Sth Rockhampton STP	19,000 EP	Fitzroy River
West Rockhampton STP	6,200 EP	Fitzroy River

All five treatment plants are operated under an Environmental Authority (EA) issued by the Department of Environment and Heritage Protection. The most stringent of the EA compliance requirements relate to the three Rockhampton STPs as they discharge into the Fitzroy River. As such this assessment will focus mainly on these three treatment plants.

FRW has previously negotiated an amendment to the EA in which the Total Nitrogen and Total Phosphorus Weekly Load limits apply to the combination of the three treatment plants discharge. This is on the basis that the three treatment plants discharge downstream of the Fitzroy River Barrage (nominally in the reach of the river between 55 and 59.2 km AMTD).

The graph below was extracted from FRW's monitoring report for the three treatment plant and it demonstrates that FRW has complied with the weekly nutrient load limit since 2007.

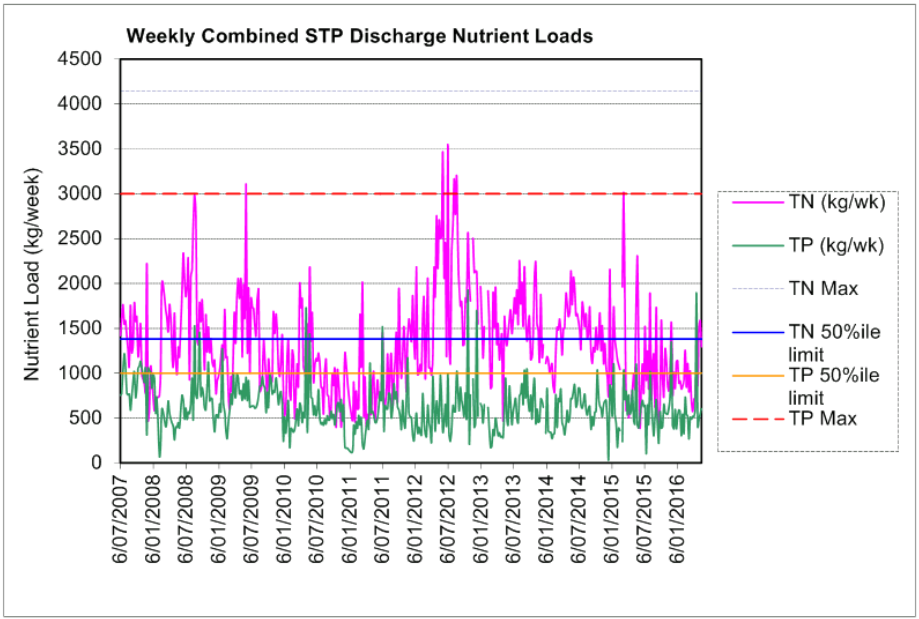


Figure 17 Weekly Combined STP Discharge Limits

As part of the EA requirements, FRW is required to regularly report any non-compliances (exceedances) with respect to limits prescribed in the EA to DEHP. The following table nominates the occurrence of these non-compliances compared to the number of results undertaken for the period July 2012 to June 2015.

Table 7 EA Exceedances for Rockhampton STPs

STP	Number of Results	Exceedances	% Exceedances
North	2692	92	3.4%
South	2597	72	2.7%
West	2592	504	19%

The above table highlights that the exceedances for the North and South STPs are relatively low and as they mostly relate to exceedances with Free Chlorine Levels, they are generally mitigated through operational procedures.

The % Exceedances at the West Rockhampton STP are quite high and it is believed that this mainly due to the age and condition of the treatment plant. It is our understanding that FRW is proposing to decommission the West Rockhampton STP and transfer its sewage load to the South Rockhampton STP. RRC is yet to confirm the budget for this project at the time of writing of this report.

Additionally, it is noted that FRW had an approved Transitional Environmental Program (TEP) for the Gracemere and Rockhampton STPs which was voluntarily applied for by FRW to cover the period of capital works upgrades at these treatment plants.

2.3.2 Opportunities and Improvements

In general terms, FRW is meeting its EA requirements for the operation of the STPs, however it is noted that there are some non-compliances which are believed to be accounted for in a TEP for the periods assigned to upgrade works currently planned. This is particularly relevant for the West Rockhampton STP which is in the process of being decommissioned.

Additionally, it is noted that FRW has recently completed an upgrade strategy for the Rockhampton and Gracemere STPs to account for future growth in the catchments and in order to meet regulatory requirements. It is our understanding that the upgrades to the South Rockhampton STP have been completed which has resulted in improved compliance outcomes. Council has also committed funding to upgrading the Gracemere STP.

Until such time that the full scope upgrade works are completed, it is difficult to identify any improvement measures at this stage as the treatment plants are generally operating within EA compliance measures.

3.0 Capabilities / Resources Assessment

3.1 Function Resource Gap Analysis

A gap analysis of key business roles / outputs was undertaken based on FRW's current staff and operational structure (presented in Table 8). This analysis was developed with FRW's management team and identified the observed gaps in resourcing and function, key risks if these gaps are not addressed and recommendations resolving these gaps and attenuating risk. The below describes the key components within the gap analysis table.

Role / Output	Key business roles or outputs identified for successful operation of FRW and discussed later in the recommended operational structure within Section 5.2.
Function	Shaded (pink) boxes in this column indicate **a gap observed** in relation to the function associated with the respective role or output being completed. For example, no function in relation to 'Innovation' was observed currently being carried out within FRW.
Resource	Shaded (pink) boxes in this column indicate **a gap observed** in relation to the resources required to complete the respective role or output. For example, dispatch is a current function that is carried out at FRW however a gap in resourcing in order to successfully carry out the dispatch role/output was observed.
Risk	Risks identified if the observed function and / or resource gaps are not addressed.

3.1.1 Observations and Improvement Opportunities

In completing the gap analysis (Table 8), the key issue of resources was identified. This was consistent with the results of interviews and workshops of other FRW and RRC staff as well as staff survey (refer Figure 18 below). It is apparent that the gaps in resourcing across many areas of FRW significantly contribute to the operational shortfalls identified in other areas discussed in this report.

Gaps in functions are often (but not always) grouped with areas of limited resources particularly in the areas of Asset Management, Planning and Capital Delivery. This was also consistent with observations made from the interviews and workshops and documentation provided.

A number of options for addressing these gaps have been provided within the table and are generally in line with the recommendations made throughout the report.

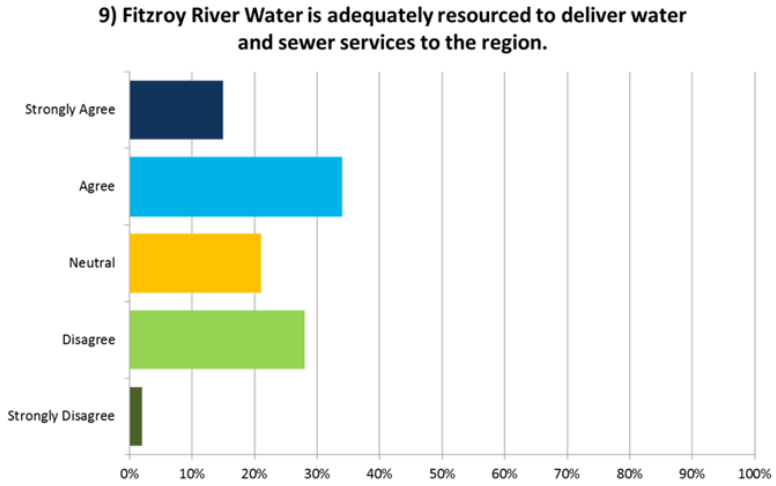


Figure 18 Staff Survey Results – Question 9

Table 8 Function / Resource Gap Analysis

Functional Unit	Role / Output	Function	Resource	Description	Risk	Recommendations
Business Support	Commercial Performance			- No gaps identified. - Currently reporting is carried out internally.		
	Business Improvement			- Both function and resource gap identified within FRW. - No resources currently dedicated / limited focus on driving business development, innovation or use of technology.	- Key risk associated with limited resources and accountability in this area are in relation to inefficient operation and business practices, and missed opportunities for improved performance.	- Review current resourcing strategies (**Recommended Action No. 04)** and FRW operational structure (**Recommended Action No. 38)** to incorporate dedicated resources for business improvement and innovation. Key functions could include (but not be limited to): • implementation & ongoing operation or smart metering (current FRW initiative) • review and optimisation of trade waste strategies; • and working with other technical staff to identify opportunity for improved use of new technologies.
	Innovation					
	Technology					
	People Management (skills development / retention)			- Function gap identified within FRW. - Primarily accountability remains with Manager / Co-ordinators with support from Workforce and Strategy (administration). - Gap identified in succession planning, staff progression and development. - It is understood that Council's executive team are currently implementing Succession Planning and Talent Management however this is still to be formally adopted within FRW.	- Limitations of the implementation of succession planning and talent management pose significant risks to operation as well as increased pressure on staff (particularly observed following recent loss of personnel in key roles) to fill gaps.	- It is recommended that succession planning and talent management be addressed, particularly with respect to this role, in accordance with **Recommended Action No. 03.**
	Meter Reading			- No gaps identified. Opportunities for improvement identified in areas of technology and strategy.		
	Administration			- Gap in administration resources identified generally across FRW. - Administration trainee utilises significant training resources while leaving a gap (after each one leaves) each year results in gap and resources used for training. - Significant administration resources used for ECM input following recent upgrade.	- Administration functions are essential for successful business operation. Limitations on resources results in additional pressure on and inefficient use of technical staff carrying out administration functions.	- Review current resourcing strategies (**Recommended Action No. 04)** and FRW operational structure (**Recommended Action No. 38)** to ensure adequate resources are allocated to administration. - Resource gaps in the area could be addressed through: • Overlapping trainee positions to allow some training to occur by previous trainee at start of placement; • Further resource sharing across FRW; and • Appointment of additional resources
Asset Management and Planning	Asset Management Plans			- Function gap in planning > 10 years identified. Potential gap in active asset planning < 10 years. - Resourcing gap identified in all areas of Asset Management and Planning within FRW.	- Risks to future operation and security of water supply and sewer services through failure or inadequacy of assets to meet demand.	- Review current resourcing strategies (**Recommended Action No. 04)** and FRW operational structure (**Recommended Action No. 38)** to ensure adequate resources are allocated to: • Working with shared asset management services to improve AM systems. • Capital planning (including scoping and estimation); and • Forward / major maintenance planning. - Resource gaps in the area could be addressed through: • Utilising existing staff with relevant skills / experience or upskilling as required; • Utilising external consultants for discrete or specialised packages of work if required; • Sharing of resources across asset classes; and • Appointment of additional resources.
	Forward Capital Planning (20 yrs)					
	Forward Maintenance Planning (Strategic)					

Functional Unit	Role / Output	Function	Resource	Description	Risk	Recommendations
	Data Integrity / Quality Management			- Both function and resource gap identified within FRW with regard to QA and data processing (whole of project lifecycle). - Significant gap in quality of GIS data and plan accuracy.	- Data feeds into all areas of operation of FRW. Shortfalls in data integrity impact efficiency of operation. - Gaps in quality management may also impact operation through decreased performance, inefficiencies (especially due to rework) and increased exposure to risk.	- Review current resourcing strategies (**Recommended Action No. 04)** and FRW operational structure (**Recommended Action No. 38)** to ensure a focus on data integrity and quality management is maintained. - Function and resource gaps in the area could be addressed through better utilisation / working with of shared services to achieve these outcomes. - Develop a Quality Management System in accordance with **Recommended Action No. 21.**
	Network Model			- Both function and resource gap identified within FRW. - Currently water and sewer network model resource (one (1) person + one (1) in training) physically located / reporting through shared services planning section. - Limited knowledge of model within FRW (i.e. one at Co-ordinator level).	- Current limited redundancy poses potential risk. Training of new staff members in this role in isolation to FRW operations is not preferred.	- Recommend bringing accountability and responsibility for water and sewer network model back to within FRW. This could be achieved through revision of the FRW operational structure in line with **Recommended Action No. 38** and with consideration of the following: • Moving of relevant / appropriately skilled and experienced personal from RRC to FRW to carry out this function; or • Upskilling of new / existing personnel within FRW. - Following on from these recommendations, long term succession planning and talent management should then be addressed with respect to this role, in accordance with **Recommended Action No. 03.**
Operation / System Control	Operation - Treatment Plants - Network			- **No current gaps identified** for treatment plant and supply (pump stations and reservoirs) operators. - Seven (7) current operators (1 x Dedicated Mount Morgan + 6 x General) - Supported by / direct report to Manager FRW (formerly Co-ordinator Treatment and Supply).	- Operators are critical for operation of FRW assets, supply of potable water and management of sewage in region. - Significant training period upon appointment of new operators (even with past experience) - Risk identified in relation to succession planning	- Although no current gap has been identified it is recommended that succession planning and talent management be addressed in accordance with **Recommendations No. 03.**
	SCADA			- Resource gap identified. - Only one (1) SCADA technician utilised for project as well as operation / maintenance. - Limited succession planning associated with this role.	- Significant risks associated with no redundancy surrounding SCADA technician role, particularly in emergency event situation. - External consultants who are familiar with the system are utilised as required.	- It is recommended that succession planning and talent management be addressed, particularly with respect to this role, in accordance with **Recommended Action No. 03.**
	Water Quality / Compliance			- Resource gap identified. - Only one (1) Water Quality Officer.	- Risks around resourcing due to limited redundancy in this area.	- It is recommended that succession planning and talent management be addressed, particularly with respect to this role, in accordance with **Recommended Action No. 03.** - Potential for upskilling existing staff should be considered.
	Trade Waste			- Resource gap identified. - Only one (1) Trade Waste Officer.	- Risks around resourcing due to limited redundancy in this area.	- It is recommended that succession planning and talent management be addressed, particularly with respect to this role, in accordance with **Recommended Action No. 03.** - Potential for upskilling existing staff should be considered.

Functional Unit	Role / Output	Function	Resource	Description	Risk	Recommendations
Maintenance	Reactive / Minor Scheduled Maintenance - Mechanical & Electrical - Civil - General Facilities			- No function gaps identified. - Minor resourcing gap for electrical maintenance identified.	- Operational risks due to criticality of electrical maintenance role. - Safety risks due to stretching of existing resources.	- Review current resourcing strategies (**Recommended Action No. 04)** Resourcing issue re electrical maintenance could be addressed through: • Utilising contractors for project based on work or during 'peak periods' • Upskilling / licencing existing staff to carry out minor electrical works (i.e. isolation of pumps) to reduce pressure on electrical staff. • Use of floating casual labour pool within Council (it is understood that this is currently being explored). • Use of more apprentices (this includes succession planning benefits).
	Dispatch / Maintenance Planning (Tactical)			- Resource gap identified. - Only one (1) dispatch officer dedicated to FRW and currently relying on 'waste' section dispatch officer.	- Dispatch officer's hold a critical role in smooth operation and maintenance of the network. - Safety risks (significant long hours) associated with reliance on single dispatch officer, particularly in emergency event situations.	- Review current resourcing strategies in accordance with **Recommended Action No. 04.** - Resourcing issue could be addressed through: • Upskilling of existing staff and sharing of roles to provide support when needed; • Combine dispatch with some functions currently carried out by 'Maintenance Planner' i.e. data / work order entry; and • Appointment of additional dispatch resources.
Capital Delivery	Construction			- No long term resource gaps identified. Gap at co-ordinator level due to positions vacant. Gaps also due to field staff on long term sick leave. - Function gap in Quality Management of construction activities completed internally.	- Short term resource gaps result in impacts on capital delivery programs and expenditure. - Gaps in quality management may also impact operation through decreased performance, increased cost (especially due to rework) and increased exposure to risk.	- Review current resourcing strategies in accordance with **Recommended Action No. 04** including options for interim resources such as continued use of contractors or casual labour pool (currently being explored by Council). Develop a Quality Management System in accordance with **Recommended Action No. 21.**
	Major / Complex Maintenance			- No gaps identified.		
	Project / Contract Management			- Significant resources gap identified. - Previous engagement of external contractors utilised help alleviate this issue.	- Under resourcing and limited number of staff with formal Contract Administration training / experience in this area pose risks to successful project delivery and potential contractual issues.	- Review current resourcing strategies (**Recommended Action No. 04)** and FRW operational structure (**Recommended Action No. 38)** to ensure adequate resources are allocated to Project Delivery and Contract Management. - Resource gaps in the area could be addressed through: • Upskilling of existing staff particularly in area of Contract Administration; • Optimised use of administration resources; • Appointment of additional internal resources; and • Continued use of external consultants for delivery of discrete projects or packages of work and high risk projects.
	Private Works			- No significant gaps identified although backup / redundancy is limited.		- It is recommended that succession planning and talent management be reviewed with respect to this function in accordance with **Recommended Action No. 03.** - Potential for upskilling existing staff and/or shared roles should be considered.

3.2 People Management

3.2.1 Observations

FRW and the Council more broadly have been through a recent period of fiscal consolidation as a result of the de-amalgamation. Hence there does not appear to have been the focus on people development that would have ordinarily occurred in the past. Based on the interviews and outputs from the staff survey, specific issues within FRW in respect of people management include:

- There is a relatively aging workforce;
- Not having a methodical approach to identifying key roles in the business and a clear plan for dealing with their succession;
- There appears to be no structured apprentice or graduate program for the business to progress the next generation of people through the business;
- Feedback from the staff survey suggests there are gaps in the general training and development of staff to enable to them to undertake key technical aspects of their roles (refer summary of results below);
- There isn't a structured leadership program for those responsible for managing teams of people. The structure of FRW means there are number of people managers who are responsible for large teams of people;
- It is understood that Council's executive team are currently implementing Succession Planning and Talent Management however this is still to be formally adopted within FRW; and
- There are gaps in capability when assessed against key business roles / outputs identified in Section 3.1.

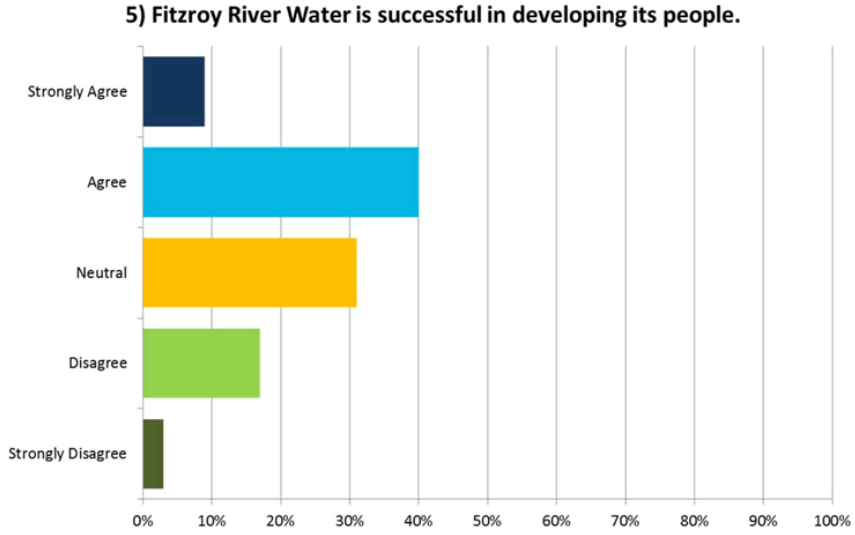


Figure 19 Staff Survey Results – Question 5

3.2.2 Improvement Opportunities

Essential to the future of FRW is a robust people development plan, which includes structured succession and talent management plans. As discussed above, it is understood that Council's executive team are currently implementing Succession Planning and Talent Management. In implementing this, the following steps should generally be followed:

- Map all of FRW's staff to the formalised RRC Succession Planning and Talent Management framework;
- Confirm the resourcing and capability requirements for the business using the completed gap analysis referred to above;
- Identify where key gaps may exist across FRW (e.g. Is their sufficient leadership or technical capability in the business? Are there any people not working to their full potential?); and
- Develop plans to address these gaps.

3.3 Recommended Actions

Table 9 Action Plan – Skills Capabilities Assessment

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
03	FRW be considered a high priority as part of the role out of Succession and Talent Management plans for the whole of Council.	H	6 – 12 months	1. The general training and development needs of staff; 2. Growing the leadership capability of people in key management roles; 3. Identifying key roles within FRW and having clear succession plans for these roles; 4. The future resourcing and capability needs of the business 5. Consider the adoption of a structure apprentice and graduate program for FRW and Council more broadly.
04	Review and address resourcing gaps in the current and new organisational structure of FRW.	H	3 months	1. Develop in consultation with the General Manager of Regional Services, a strategy for addressing these resourcing gaps

4.0 Operational Processes Review

4.1 Safety and Well Being

4.1.1 Observations

Safety has evolved considerably across Council and within FRW. This has been driven in part by the national harmonisation of safety legislation throughout Australia. Council uses a Safe Plan methodology to guide its approach in this area.

An in depth analysis of FRW's approach to safety has not been undertaken, however the following were observed:

- Council's March 2014 Workplace Health and Safety Policy is very comprehensive and importantly clearly identifies Council's duty of care to not only its employees, but also contractors and others such as volunteers.
- As shown in the summarised results below, the staff survey provided a generally positive response regarding safety with over 70% either agree or strongly agree that FRW takes safety seriously and manages it well. It is worth noting that a material percentage of staff (the remaining approximately 30%) responses were either neutral or disagreed regarding this same question. There were also a number of the comments suggested there are opportunities for improvement.
- The staff survey (refer to Figure 20) and other interviews suggest there is an opportunity to take a stronger focus on safety in the planning and design phase of creating and renewing assets.
- It is understood that safety will also be a focus of RRC's organisational Culture Development Program and upcoming campaign.

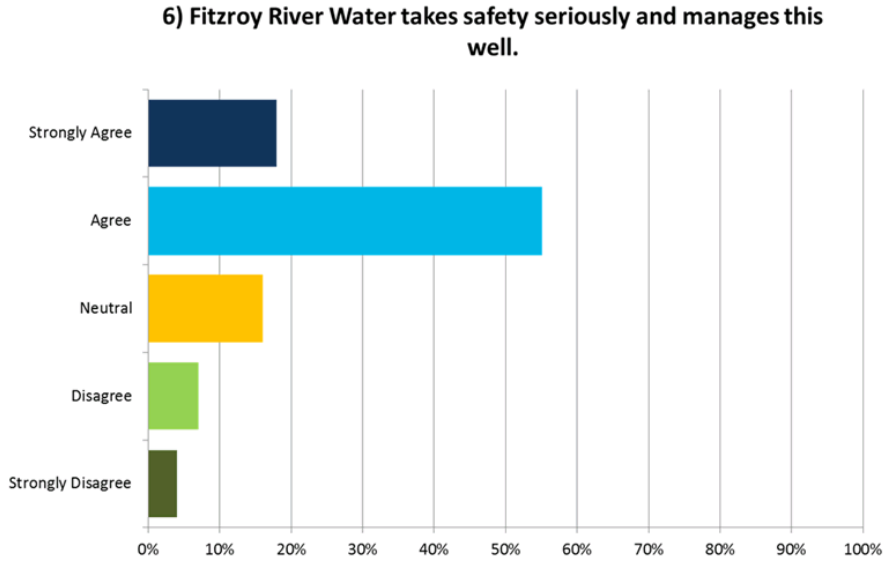


Figure 20 Staff Survey Results – Question 6

4.1.2 Improvement Opportunities

It is noted that a significant number of organisations have evolved their approach to safety by focusing on safety culture to complement their structured and documented safety management systems. There is a growing realisation that management systems and documented procedures alone will not make workplaces safe, there has to also be a focus on the attitudes of people using those systems. It is recommended that Council reinforce a Safety Culture approach with FRW and Council wide to complement its current approach to managing Workplace Health and Safety. As this is likely to be achieved through the organisational Culture Development Program a follow up staff survey is recommended following its implementation. Should there be no improvement in staff perception of FRW and Council's commitment to safety a targeted campaign to FRW is recommended to reinforce the 'Safety Culture' may be required.

4.1.3 Recommended Action Plan

Table 10 Action Plan – Safety and Well Being

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
05	Incorporate a "Safety Culture" approach.	M	12 months	1. Complete RRC organisational Culture Development Program and other associated campaigns focused on safety. 2. Re-survey FRW staff to ensure improvement in perception / attitude towards Council's management of safety; 3. Undertake a targeted FRW campaign surrounding the Safety Culture approach if required.

4.2 Technology

4.2.1 General

The use of current and innovative technologies was generally reviewed in consultation with RRC and FRW staff. The staff survey provided positive feedback in relation to the use of current technologies for asset management and service delivery. This is consistent with stakeholder comment surrounding FRW's SCADA system (discussed further below). A large portion of staff were neutral on this issue, which may be due to the limited use of innovative technologies in day to day operations outside of the SCADA system.

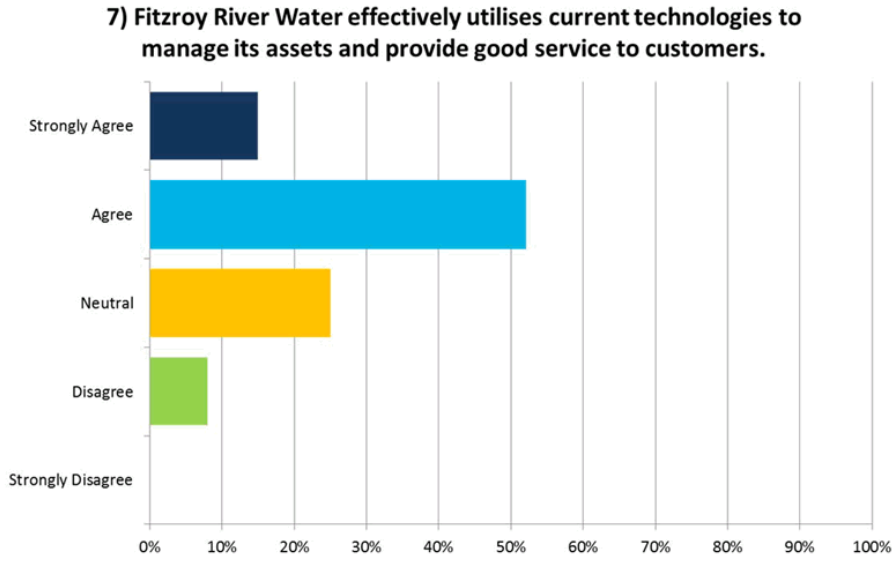


Figure 21 Staff Survey Results – Question 7

4.2.2 Operations

4.2.2.1 Observations

Supervisory Control and Data Acquisition (SCADA)

FRW currently operates and monitors the majority of its water and sewer supply and delivery networks through a robust Supervisory Control and Data Acquisition (SCADA) system. The system is monitored by operators twenty-four (24) hours per day, seven (7) days a week from the dedicated control room at the Glenmore Water Treatment Plant (GWTP). The SCADA servers are also housed at the GWTP and are primarily maintained by a dedicated System / Process Technician with support from internal electricians, shared RRC Information Technology (IT) services and external consultants as required.

A significant upgrade of the SCADA system at the GWTP is scheduled for 2016/17 and 2017/18 with the detailed technical specification having being prepared (by FRW and an external consultant) and a cost estimate prepared. It is understood that the current and past upgrades of the SCADA system have been driven internally by FRW staff based on known age of the system (approximately every four (4) years), resolution of system issues, risk mitigation and changes in network and system requirements with little to no input from the shared RRC asset management services.

Communication

The primary form of communication between staff and from dispatch to operation and maintenance crews is via mobile phone. It is understood that digital radios are currently in the process of being rolled out to external and providing a number of benefits including dispatch efficiency, ease of communication across all FRW field crews

and the ability to track the location of crews for operation, gathering of work duration data, safety and efficiency reasons. It was reported that following the recent TC Marcia, when communications were lost due to damaged telecommunications infrastructure in the area.

Standardisation

Standardisation and updating of communications infrastructure for control and monitoring of assets was raised as an ongoing issue for FRW that is being addressed through the forward Capital Plan. It was reported that delays associated with resolving these issues was primarily due to limited resourcing and prioritisation of other projects / work.

4.2.2.2 Improvement Opportunities

Supervisory Control and Data Acquisition (SCADA)

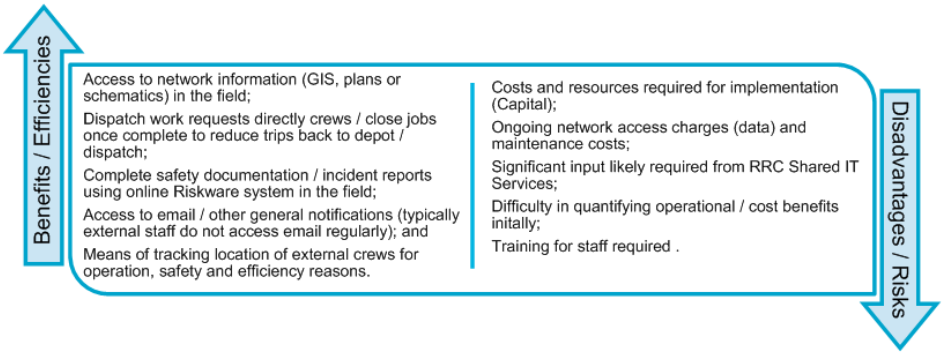
Due to the criticality of the SCADA systems it is recommended that the Asset Management Plan be reviewed in conjunction with FRW and Asset Management staff to include framework for identification of future replacement or upgrades of SCADA infrastructure. The Asset Register should also be reviewed to ensure that all SCADA related assets are included and up to date.

Communication / Operational Efficiency

A number of improvement opportunities have already been identified within FRW to improve communication and operational efficiency including:

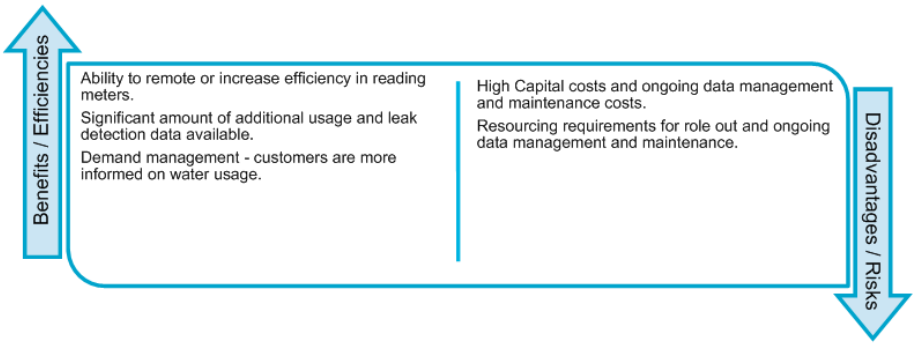
Mobile Computing

It is recommended that the provision of mobile tablet computers for external field staff (i.e. one per vehicle) be further explored potentially through investigations, discussions with other similar Councils (i.e. Mackay Regional Council has recently implement in last 5 years), trials with small sample of staff and if found generally feasible, preparation of business case for full implementation for review. A number of benefits and risks have been identified below.



Smart Metering

The key benefits and risks of implementing smart metering into FRW have been summarised below. Through consultation with FRW staff it was found that the introduction of smart metering has been investigated and a trial rollout is planned for 2016/17. The results of this trial should be reviewed and recommendations regarding future implementation (if found feasible) presented.



4.2.2.3 Action Plan

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
06	Update Asset Management Plan to include framework for identification of future SCADA renewal / upgrade.	M	6 months	Asset Management Plan updated to include SCADA renewal / upgrade framework and new revision approved.
07	Review asset register to ensure all SCADA infrastructure is included and up-to-date.	M	6 months	Asset register reviewed and updated with all SCADA information.
08	Investigate and if found feasible prepare a business case for the implementation of mobile computing.	L	24 months	Results of investigation into mobile computing / business case reviewed and approved by Manager FRW.

4.2.3 Innovation

4.2.3.1 Observations

Through interviews and workshops with key FRW and RRC staff it was established that a key goal was to capitalise on technology to enable increased productivity and customer service. Further to this, consultation with the Water, Waste and Airport Committee highlighted Council's desire to incorporate innovation and potential business development opportunities into it FRW's functions and accountabilities. It was observed, however, that there are currently no resources dedicated to the areas of innovation and business improvement, in relation to technology or for FRW as a whole.

4.2.3.2 Improvement Opportunities

In order to meet the above mentioned goals, and in line with the Action Plan identified within Section 5.2, it is recommended that resourcing and structure be reviewed to incorporate activities and accountability for investigations into new and innovative technologies to improve operational efficiency, revenue growth and customer service standards.

4.3 Asset Management

4.3.1 Background

Currently, the Asset Management function is not managed within FRW but as a shared service from RRC's Corporate Asset Group. It is understood that Corporate Asset Group primarily provides support to FRW through:

- Prepare planning and maintenance activities every year for all asset types;
- Maintain the asset register;
- Update and manage Council's Asset Management system;
- Overall ownership of the Strategic AMP and the Water and Sewerage AMP's.

As per previous discussions, we believe that the overall Asset Management function should remain the responsibility of the Corporate Asset Group but FRW should become an informed buyer of Asset management services though the re-establishment of an Asset Management function within FRW.

AECOM recommends that Council and FRW continue to evolve its approach to Asset Management by using as a guide, internationally recognised standards and frameworks such as:

- The International Infrastructure Management Manual (IIMM); or
- ISO55000 – the International Standard for Asset Management.

It is not proposed that FRW or Council attain certification against these frameworks, but rather use them as a guide to their overall approach to Asset Management. These best practice frameworks will help the management of all types of assets across the whole asset life cycle (from planning and creation through to renewal). Furthermore, these frameworks outline the necessary business support required to achieve efficient and effective asset management.

Council is primarily an asset based business. The levels of service it provides and the rates it charges its customers are almost exclusively dependent on how well it manages the wide variety of assets for which it is responsible. The following diagram from ISO55000 provides a good representation of where the component parts asset management fits within a business like Council and FRW.

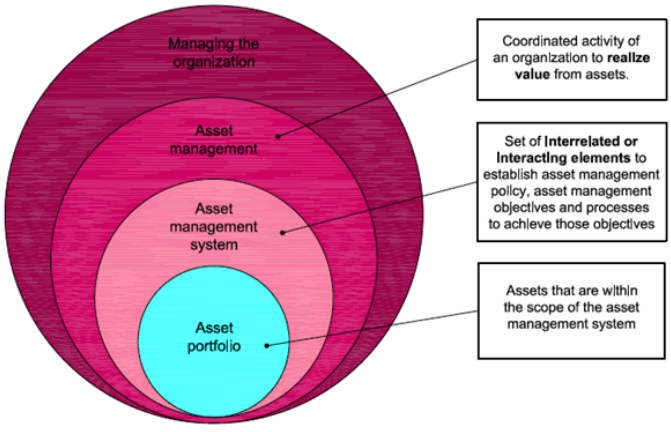


Figure 22 The Structure of Asset Management within A Business (ISO55000: 2014)

To support the argument for a more structured approach to asset management, ISO55000 outlines the following specific benefits:

- improved financial performance through improving return on investments and reducing costs;
- informed asset investment decisions which effectively balance costs, risks, opportunities and performance;
- improved risk management which reduces financial losses, improves health and safety, good will and reputation, and minimizes environmental and social impact;
- improved services and outputs;
- improving the organization's ability to reduce emissions, conserve resources and adapt to climate change;
- improved demonstration of compliance by transparently conforming with legal, statutory and regulatory requirements, and adhering to asset management standards, policies and processes;
- enhanced reputation through improved customer satisfaction, stakeholder awareness and confidence;
- improved organizational sustainability by more effectively managing short and long-term effects, expenditures and performance;
- improved efficiency and effectiveness by reviewing and improving processes, procedures and asset performance can improve efficiency and effectiveness, and the achievement of organizational outcomes.

As FRW is an asset dependent business, adopting a structured approach to Asset Management is not an optional extra for Council but rather core business. A structured framework also provides Council with greater confidence that its entire asset suite (from roads, to parks, to airports, to cattle yards, to drainage and water and sewerage) is being managed consistently.

4.3.2 Observation and Areas for Improvement

The maturity of RRC / FRW's current Asset Management Systems was assessed against the International Infrastructure Maintenance Manual (IIMM) Guidelines (refer Appendix D). Through workshops with FRW and RRC staff the current position and target level were confirmed. Recommendations on how these target maturity levels, generally in line with the IIMM requirements, have been provided.

4.3.3 Recommended Action Plan

Table 11 Action Plan – Asset Management

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
09	Progress **AM Policy Development** from "Core-Intermediate" to "Advanced"	M	5 years	Refer Recommended Activities to Achieve Maturity Goal within.
10	Progress **Levels of Service and Performance Management** from 'Intermediate' to 'Advanced'			
11	Progress **Demand Forecasting** from 'Intermediate' to 'Advanced'			
12	Progress **Asset Register Data** from 'Core' to 'Advanced'			
13	Progress **Asset Condition** from 'Core' to 'Advanced'			
14	Progress **Decision Making** from 'Basic' to 'Core'			
15	Progress **Risk Management** from 'Basic-Core' to 'Intermediate'			
16	Progress **Operational Planning** from 'Core' to 'Intermediate-Advanced'			
17	Progress **Capital Works Planning** from 'Basic-Core' to 'Intermediate'			
18	Progress **Financial and Funding Strategies** from 'Basic' to 'Core'			
19	Progress **AM Teams** from 'Core' to 'Advanced'			

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
20	Progress **AM Plans** from 'Basic' to 'Intermediate'			
21	Progress **Management Systems** from 'Basic' to 'Core'			
22	Progress **Information Systems** from 'Core' to 'Intermediate'			
23	Progress **Service Delivery Mechanisms** from 'Core' to 'Intermediate'			
24	Progress **Improvement Planning** from 'Aware' to 'Advanced'			

4.4 Planning and Capital Delivery

4.4.1 General

Over the next 10 years (and beyond), FRW have already identified significant Capital spending required to maintain and upgrade the regions water and sewer treatment plants, pump stations and reticulation networks in order to meet current and future demands. As a result, the robustness and effectiveness of Fitzroy River Water's current planning and delivery models, for its Water and Sewer Capital Works program, was identified as a key focus area in this review. Through workshops and interviews conducted with RRC and FRW staff the following goals with respect to Capital Works Planning and Delivery:

- Price Plans underpinned by a robust risk based forward 20 year capital program;
- Capital Works Planning reach the equivalent of 'Intermediate' level assessed against the IIMM guidelines;

The follow section outlines observations (developed through stakeholder consultation), identified potential improvement opportunities and a recommended action plan for each of the stages in the Capital Delivery process to assist FRW and RRC in reaching these goals.

Figure 23 Capital Works Project Delivery Cycle

4.4.2 Potential Project Identification and Prioritisation

4.4.2.1 Observations

FRW's current process for identification and prioritisation of capital projects involves the generation of a list of active and passive water and sewer assets due to reach or exceed their estimated operational life. This list is produced by the shared services Asset Management section with information derived from Conquest, RRC's current asset database package. Asset conditions and number of recorded failures is also considered where this information is available however condition assessments are currently not conducted systematically. Operational staff review this list and add projects that are not currently meeting their required level of service due to one of the failure modes defined by the Asset Management Plan.

In 2015, FRW extended its forward capital planning using the above methodology to develop a 10 year Capital Budget Forecast, which is a positive step towards achieving compliance with IIMM and ISO55000.

The following were observed with regard to identification, prioritisation and budgeting of capital works:

- Inconsistencies observed in the level of robustness of prioritisation methodologies across asset classes with no clearly defined and consistent prioritisation strategy documented / followed;
- Passive Assets:
  - Robust methods in relation to network services assets (water and sewer mains) renewals / upgrades generally based on age / condition and no of maintenance 'hits' information as well as criticality of asset / risk of failure from the AM shared service. Operations staff adjust priorities based on failure modes (structural, capacity, reliability, obsolescence);
  - Standard non-trunk (generally) water main replacements and sewer main relining / manhole refurbishments completed consistently based on a set budget. Prioritisation of other upgrades is generally not made over this set budget;
  - Some gaps in strategy around networks services / passive assets in relation to rising mains and major trunk mains.
- Active Assets:
  - Prioritisation of projects made generally based on data / inputs from both AM shared service and FRW with consideration of asset age, criticality / risk of failure, performance , operation and maintenance costs, identified opportunities for cost reduction, safety etc;
  - Detailed planning surrounding waste water treatment plants has been conducted through engagement of consultants providing groundwork for the current capital program;
- Significant portion of the assets are now reaching the end of their estimated operational life;
- Limited resources available / allocated to capital planning which puts constraints on the robustness in approach to capital planning;
- Examples of good practice financial management were observed e.g. some projects were 'pushed back' due to budgetary constraints or where assets were in good condition or deemed to be low risk of failure.

4.4.2.2 Improvement Opportunities

In order to achieve FRW and RRC's goals of a robust risk based 20 year capital works program (general alignment with ISO55000), as part of the overall Asset Management Strategy, it is recommended that the current planning processes and methodologies already primarily being implemented be expanded upon and formally documented to form a Capital Works Prioritisation Methodology with clear risk frameworks for selection and prioritisation of projects. Operational staff input into capital planning is key and should continue however risks associated with retirement / changing of key personnel (recently observed) could be better managed through formal documentation resulting in a more consistent approach.

The Capital Works Prioritisation Methodology should:

- be developed in conjunction with FRW Operational and RRC Asset Management staff;
- include framework for risk assessment (consider integration of principals of ISO31000);
- include framework for budget allocation deliberations i.e. project prioritisation based on risk;
- means of identifying and incorporating rare / low probability but catastrophic consequence events into project identification and prioritisation;
- include process of continual improvement; and
- be common across all asset classes (rather than splitting Network Services and Treatment and Supply) to identify risks and prioritise projects across the whole network.

In order to allow the formalisation of the prioritisation methodology and maintain the robustness of approach into the future, current resourcing should be reviewed and addressed.

4.4.2.3 Recommended Action Plan

Table 12 Action Plan – Capital Project Identification and Prioritisation

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
25	Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects.	M	12 months	1. Capital Works Prioritisation Methodology document reviewed and approved by Manager FRW. 2. All projects forecast within the next five (5) years to be reviewed and re-prioritised using methodology.
Ref 04	Review and address resourcing gaps as per **Recommended Action No. 04.**			

4.4.3 Project Scoping and Estimation

4.4.3.1 Observations

Based on the information provided and interviews conducted it is understood that the level at which projects are scoped and estimated varies based on the asset type, project complexity and timing of expenditure. Generally, projects forecast for delivery within the next three (3) years have high level scoping and estimations attributed. Non-trunk reticulation network upgrades / renewals (i.e. water mains replacements) are generally scoped in more detail with higher confidence estimations due to consistency of scope and construction being completed internally. Beyond the three (3) year forecast however, the majority of projects have been conceptually identified only (i.e. project name / descriptions) with indicative budget costs allocated. Non-trunk reticulation upgrades / renewals are grouped into type with set, consistent budgets allocated for each year following.

Assessment of FRW's Asset Management System against the International Infrastructure Maintenance Manual (IIMM) within Appendix D of this report identified that based on the above FRW's current Capital Works Planning is currently equivalent to a 'Basic' to 'Core' level.

4.4.4 Improvement Opportunities

Improvement of FRW's current capital budget forecasting through increased confidence in scoping and estimates would provide greater certainty and reduced risk surrounding expenditure. Based on workshops held with key FRW / RRC staff the goal of achieving the equivalent of 'Intermediate' level with regards to Capital Works Planning against the IIMM guidelines (refer to the text box right) was established.

Capital Planning (IIMM) - "Intermediate" Level
"Formal options analysis and business case development has been completed for major projects in the 3-5 year period. Major capital projects for the next 10-20 are conceptually identified and broad cost estimates are available."

In order to meet this goal, it is recommended that the following be implemented:

- Prepare more robust / detailed scope and budget estimates for projects forecast within the next three (3) years to achieve great budget confidence levels;
- Carry out formal options analysis and develop business cases to determine high level project scopes and estimates for major projects forecast within the next three (3) – five (5) years;
- Prepare high level scope and budget estimates for all projects forecast within the next three (3) – five (5) years to achieve greater budget confidence levels;
- Review budgets and prepare concept scopes and estimates for all project forecast within the next five (5) to ten (20) years using staff experience and available industry information; and
- Carry out an annual review of project scopes and estimates and provide more detail / confidence as project move into different forecast periods.

These measures could be achieved more effectively and efficiently through:

- Preparing standardised business case, scope identification and cost estimation templates to assist in more efficient cost estimation of similar projects;

- Develop / identify indexes for replacement costs for assets future use in high level cost estimation;
- Review the current resources and structure in line with the recommendations made within Sections 3.3and 5.2 of this report to ensure adequate resources (both internal and external) are allocated;
- Review staff skills and experience relevant to project identified and seek advice or input from industry technical specialists, suppliers and consultants where required; and
- Incorporate scoping, estimations and specification writing for future projects in budgets and planning, particularly where it has been identified that consultants will be required, to ensure appropriate ongoing budgets and resourcing is allocated.

4.4.4.1 Recommended Action Plan

Table 13 Action Plan – Capital Project Scoping and Estimation

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
26	Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels.	M	12 months	Projects forecast within: - *Next 3 years* – fully scoped and estimated - *3-5 years* - formal options analysis and business cases developed for major projects. High level project scopes and estimates for all projects - *5-20 years* - concept scopes and estimates prepared using staff experience and available industry information
27	Carry out an annual review of projects scopes and estimates and provide more detail / confidence as project move into different forecast periods.	M	Ongoing	As above.
Ref 04	Review and address resourcing gaps as per **Recommended Action No. 04.**			

4.4.5 Project Management and Delivery

4.4.5.1 Observations

Management / Resourcing

FRW does not currently have a dedicated project delivery team. Resourcing for delivery of capital projects is shared across both the Treatment and Supply and Network Services sections. In 2015, a contract project manager was engaged to assist in delivery of projects. Scheduling, budget tracking and co-ordination of project delivery occurs at a high level through the use of a spreadsheet / gantt chart. Both Network Services and Treatment and Supply are included within the current plan however there appears to be minimal sharing of resources across the sections.

The majority of reticulated passive asset upgrades and renewals are constructed and managed using internal resources within the Network Services team. Water and sewer main replacements and upgrades are generally carried out by the dedicated construction team however all sewer relining and chamber / well refurbishments are carried out by specialist contractors. The resources utilised for delivery of Network Services projects are also utilised for operations and maintenance activities, on varying levels. Detailed designs for these projects are completed by the shared RRC Engineering Services team who utilise internal staff and consultants depending on resourcing the technical requirements.

In contrast to the reticulation passive asset capital projects, the majority of Treatment and Supply active asset renewals and upgrades are completed by contractors, under both general construction and design and construct contracts, and managed by internal resources. As discussed above, treatment and supply capital projects are

generally multidisciplinary, more complex and while they have some common elements, are quite varied in scope. It was observed that there appears to be currently limited capacity internally for delivering M&E projects.

The gap analysis (refer Section 3.0) conducted in conjunction with the FRW Management Team, found a clear gap in resourcing for the delivery of capital projects. These findings were supported by interviews and workshop discussions with key FRW and RRC staff and evidence of underspending of Capital Budgets. The shortfalls in capital expenditure appear to occur more consistently for Treatment and Supply budgets. This appears to be due to lower resources within Treatment and Supply (contract Project Manager required), reliance on procurement time frames and Network Services having ability to move budgets around to keep ensure maximum utilisation of internal construction crews. In additional to this, Tropical Cyclone Marcia's impact on the network and subsequent water quality issues further reduced available resources for Capital Delivery.

Accountability

The procurement delays together with the identified project delivery resourcing issues (project managers over utilised) has resulted in project delivery timeframes being extended and significant budget carry over to . This contributed to by the shortfalls in planning, scoping and estimating of projects making it difficult for FRW and RRC management to hold Project Managers accountable for the on time and on budget delivery of their projects. It is recommended that Council considers including performance targets for Project Managers as part of salary/performance reviews undertaken by Council.

Quality

Shortfalls in quality management and consistency, surrounding the delivery of capital projects, have been observed. Further to this, FRW staff have indicated that there is currently limited quality control undertaken for construction works completed internally.

4.4.5.2 Improvement Opportunities

A number of opportunities for improvement have been identified in the key areas of planning, resourcing, strategy and monitoring as per the following:

Planning

Improvements in project planning, scoping and estimation will improve delivery outcomes through greater confidence in programs and expenditure. This can be achieved by allowance of sufficient time and resourcing for detailed specification writing in planning phase and better incorporation of procurement timeframes earlier (i.e. at the end of previous financial year).

Resources

A detailed resourcing plan should be developed for the delivery of upcoming Capital Projects over next 5 years. This plan should incorporate:

- writing of detailed technical specifications and procurement if required;
- internal resourcing considering:
  - balance of operational workload (if staff are not dedicated to projects only) particularly in storm season periods;
  - existing skills / qualifications, training and staff development requirements;
  - utilisation of administration resources (contract and general);
  - aligning project risk level to staff skills and experience (i.e. graduate level staff assigned low risk projects);
- external resourcing considering:
  - use of contractors and consultants for both project / contract management and construction / installation;
  - various options for packaging of works (i.e. combining similar projects, short or long term or project specific secondment options);
  - potential to establish a 'Project Management Office' for use by consultants and other dedicated project delivery staff; and

- internal resources required to manage external consultants / contractors.

- distribution / sharing of resources between staff who typically work on former 'Network Services' or 'Treatment & Supply' projects.

Strategy and Monitoring

Opportunities for improvement of FRW's current management of Capital Delivery, on a day to day basis, have been identified following addressing of the key resourcing issues identified. This could be achieved through development of a more robust annual project delivery strategy combining all projects (Network Services and Treatment and Supply) and including (but not limited to) the following information:

- Project information;
- Project Manager accountable;
- Breakdown of internal and external resources required (including timing);
- Schedule and key milestones to identify and avoid clashes of critical / high resource periods (i.e. commissioning); and
- Ongoing budget vs expenditure (updated monthly) and could include potential / approved variations.

This delivery strategy should be developed annually, prior to the commencement of the next financial year and then reviewed and updated throughout the year. This could be done by hold fortnightly / monthly project delivery meetings with all project managers to review schedule, budget and resources and adjust accordingly. Through consultation with key FRW staff, it is evident that better internal communication, on all levels and between 'sections' of FRW, could significantly help to improve the efficiency and effectiveness of Capital Delivery. Better communication would allow for better sharing of resources, particularly in times of high demand. The outcomes of project delivery meetings should be shared with key supervisors (i.e. at maintenance meetings) better highlight scheduling clashes, resourcing issues and improved overall efficiency.

Quality

In order to reduce risk and increase efficiency in both the internal and external delivery of capital projects, focus on quality and consistency should be provided. Refer Section 0, 4.5 and Appendix D for further discussion and recommendations surrounding Quality Management.

4.4.5.3 Recommended Action Plan

Table 14 Action Plan – Capital Project Management and Delivery

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
28	Develop a detailed Capital Project Delivery resourcing plan for the next 5 years incorporating internal and external resources	H	3 months	5 year capital works project delivery resourcing plan document reviewed and approved by Manager FRW.
29	Improve / develop more robust capital project delivery plan for 2016 /17 financial year	M	3 months	2016/17 Capital works project delivery plan document reviewed and approved by Manager FRW
30	Hold regular (fortnightly / monthly) capital project delivery meetings with all project delivery staff	M	12 months	Regular (fortnightly / monthly) capital project delivery meetings with all project delivery staff held over the last 12 months.
31	Incorporate options for Project Management accreditation (i.e. under Australian Institute of Project Management (AIPM))	L	18-24 months	Key project delivery staff on pathway to AIPM accreditation.
Ref 04	Review and address resourcing gaps as per **Recommended Action No. 04.**			

4.4.6 Procurement

4.4.6.1 Observations

The majority of procurement for the delivery of capital projects (externally resourced) is facilitated by the shared services Contracts team. This appears to work well with dedicated and skilled personnel who have an understanding of procurement procedure. Cross communication between FRW staff and the contracts team appears to be adequate.

Issues associated with procurement are generally in relation to the premise that the current procurement process / arrangement is time consuming due to the process being considered onerous. It has been observed that the main issue is primarily in relation to shortfalls in planning to account for the procurement process for delivery of capital projects. For example, development of technical specifications required to be released to the market for tender are not prepared in advance and subsequently insufficient time for procurement is allowed. As identified previously, it has been observed that these shortfalls are primarily due to resourcing constraints within FRW.

4.4.6.2 Improvement Opportunities

Generally, it appears that addressing key issues around resourcing and subsequent improvement in other areas of capital planning and delivery, as previously discussed, will assist reduce the impacts of long procurement times on project delivery schedules. However, the following could be considered to further streamline these processes.

- Internal training around procurement procedures for project delivery staff;
- Emphasis on maintaining consistency / utilising this shared service; and
- Review of contract shared services resourcing as required, particularly if project delivery ramps up and more external resources are utilised to meet project delivery targets.

4.4.6.3 Recommended Action Plan

Table 15 Action Plan – Procurement (Capital Projects)

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
32	Provide internal training on Council procurement systems and requirements for Project Delivery staff.	L	6-12 months	All project delivery staff has completed Council procurement systems training.
Ref 04	Review and address resourcing gaps as per **Recommended Action No. 04** in order to address issues with procurement and ultimately project delivery.			

4.4.7 Contract Management Systems

4.4.7.1 Observations

Currently the preparation of tender and contract documents are primarily carried out by RRC's Contracts team (i.e. a shared service) with projects handed over to FRW following award and signing of the contract. RRC's contracts team are responsible for management of the security payments / bank guarantees received however all other contract administration is carried out by the FRW nominated Superintendent and support staff. It is understood that many a number of staff currently manage a range of different contract types in addition to their current and varied operational roles.

Based on interviews conducted with key RRC / FRW personnel it was found that lack of Contract Administration / Management training and understanding of the associated risks may be a Council wide issue. It is understood that FRW and its contract managers have access to legal support through Council's register of pre-qualified suppliers.

4.4.7.2 Improvement Opportunities

As part of the function / resource gap analysis (discussed in Section 3.1) it is strongly recommended that the contract administration / management responsibilities and skills of key project staff be reviewed. A combination of internal, external and on the job training should then be incorporated into development plans as required and to an appropriate level based on project size and risk and availability of other assistance i.e. qualified Contract Administration staff.

In conjunction with the above, for simplicity and quality control, it is recommended that the Quality Management System (as discussed in the Asset Management section) include standardised templates, forms and processes for Contract Administration/Management all FRW project delivery use. Previous 'Major Projects' templates could be utilised and the standard templates / procedures developed with project delivery staff from other parts of Council to form a uniform approach.

4.4.7.3 Recommended Action Plan

Table 16 Action Plan – Capital Project Contract Management

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
33	Provide internal, external and on the job Contract Administration / Management training for Project Delivery staff.	L	12 months 12-24 months	- Project delivery staff on high risk / major projects have completed formal Contract Administration / Management training; and - All other project delivery staff have completed either informal or formal Contract Administration / Management training.

4.4.8 Project Closure / Review

4.4.8.1 Observations

FRW have reported that recent critical pump station major capital upgrade projects have resulted in significant operational cost (energy consumption), control, risk mitigation and safety benefits. Some of these benefits are identified and quantified at business case / project identification stage however some benefits (i.e. power savings cannot be accurately quantified until the project is complete). It is understood that benefits analysis is carried out when appropriate however a formalised project closure procedure is not in place.

4.4.8.2 Improvement Opportunities

Opportunities for past project learnings to be better integrated into project prioritisation, planning and delivery have been identified through use of consistent project closure procedures into medium to high risk projects. Project closure procedures can include;

- internal (technical / operational staff) monitoring performance over extended period following completion;
- engaging external resources (i.e. incorporate into original project scope or third party brought in to review);
- conducting general 'lessons learned' workshops with contractors as well as operational and project delivery staff; and
- integration of learnings back into planning and delivery stages of future projects.

The results of these reviews / workshops could help:

- identify potential future opportunities for business growth, cost reduction and risk mitigation;
- in the preparation of more robust project scopes and technical specifications;
- identify and mitigate of safety or operational risks in future projects;
- identify resourcing or skills gaps;
- inform cost and schedule estimates for future projects; and/or
- identify preferred contractors, consultants or suppliers.

4.4.8.3 Recommended Action Plan

Table 17 Action Plan – Capital Project Closure / Review

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
34	Integrate formalised project closure and review procedures into medium to high risk projects.	H	12 months	Standard project closure procedures have been developed and documented including mechanisms for integration of learnings back into planning and delivery stages of future projects; and All medium to high risk projects completed within the designated timeframe have undergone project closure / review procedures.

4.5 Quality Management

4.5.1 Observations

As nominated in Section 2.0, FRW has a number of regulatory drivers that they are required to fulfil in the delivery of water and sewerage services to the community as follows:

- Customer Service Standards;
- Drinking Water Quality; and
- Compliance with Environmental Authorities relating to STP discharge.

On this basis, as these items are specifically nominated in a regulatory environment, it is believed that there is little benefit of including these items in a Quality Management System.

With respect to project delivery, shortfalls in quality management and consistency, surrounding the delivery of capital projects, have been observed. Further to this, FRW staff has indicated that there is currently limited quality control undertaken for construction works completed internally. It is noted that the development of a Quality Management System was a key recommendation in the Section pertaining Asset Management.

4.5.2 Improvement Opportunities

In order to reduce risk and increase efficiency in both the internal and external delivery of capital projects, focus on quality and consistency should be provided. It is recommended that the following be incorporated into the Quality Management System, as discussed in the Asset Management section:

- Review of Technical Specifications;
- Quality control framework for works constructed internally (including Inspection and Test Plans etc); and
- Framework for project management / delivery framework (including reporting and documentation requirements). There is potential to work with project delivery staff from other sections of council for a uniform approach.

4.6 Emergency Management/Response

4.6.1 Observations

FRW's Draft Emergency Response Plan (Doc. No. FRW-09-02-P01), dated 14th November 2012 (referred to in this document as Draft ERP) has nominated four Incident Levels as follows:

Description	Short Definition
Level 1 - Incident	Incident can generally be dealt with by site resources without additional assistance.
Level 2 – Major Incident	Potential for adverse publicity that may result in: - Environmental Impacts - Significant loss of supply - Minor business continuity or technology impacts - Customer impacts
Level 3 – Emergency	An event that requires substantial off-site coordination and major levels of external resourcing and support.
Level 4	Requires a whole of Rockhampton Regional Council response.

It is noted that the most recent event that triggered the requirements of Level 4 response was Tropical Cyclone (TC) Marcia that crossed the coast as a Category 5 system near Shoalwater Bay on 20th February 2015. It continued inland and traversed over Rockhampton as a Category 2 shortly after.

During the interviews with senior staff of both RRC and FRW, it was generally noted that FRW responded very well to the effects of TC Marcia on the water and sewerage system with minimum disruptions. Additionally, the survey of FRW staff indicated that the staff strongly believes that FRW manages incidents well as evidenced in the chart below:

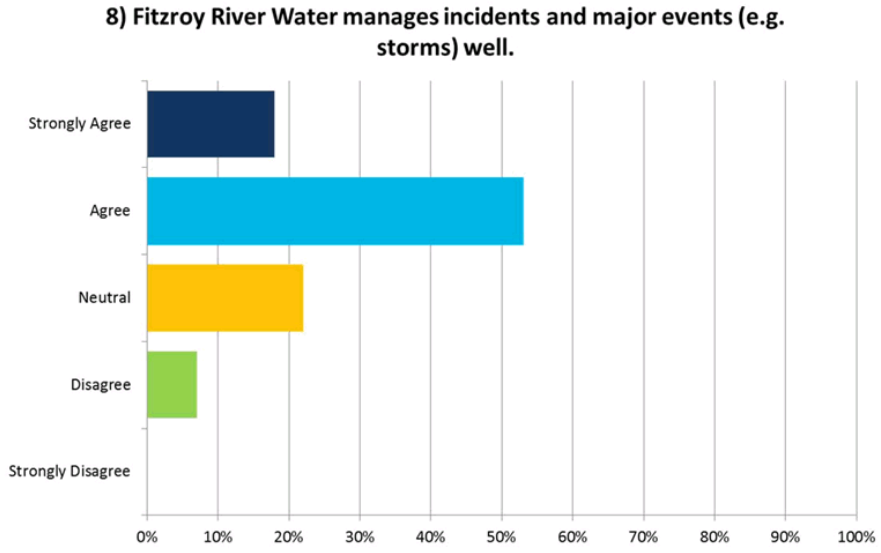


Figure 24 Staff Survey Results - Question 8

What was not evident through interviews with senior staff was whether the Draft ERP was utilised during the TC Marcia event. Advice received during the interviews was that (a) some staff did not know the existence of the Draft ERP and (b) the success of the response to the TC Marcia event was primarily due to the knowledge of individual staff.

With recent key staff movements away from FRW, there is a risk that knowledge of Emergency Management may be lost without adequate documentation.

4.6.2 Improvement Opportunities

Further to the discussion above, it is therefore an imperative that a fully functional and tested ERP is revised, finalised and implemented. With TC Marcia relatively recent, it is now an opportune time to revise the ERP with lessons learnt from this event. Additionally the ERP should be revised to reflect current structure, roles and responsibilities. At the very least the ERP should be reviewed on at least a yearly basis for currency.

Additionally, there should be an annual training program associated with the ERP that is tailored to suit the responsibility and roles of individuals nominated in the ERP.

It is understood that RRC are reviewing procurement frameworks so that critical equipment, spares and services can be procured without delay before and after emergency incidents. It is therefore recommended that FRW engages with RRC Procurement to identify critical equipment, spares and services (electrical contractors, etc) that are needed before and after an event to ensure service continuity.

4.6.3 Recommended Action Plan

Table 18 Action Plan – Emergency Management

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
35	Revise, finalise and implement an Emergency Response Plan	H	6 m	1. Incorporate Lessons Learnt from TC Marcia and other recent events; 2. Work with RRC procurement to identify critical equipment/services for disaster management and include in ERP; 3. Prepare a final ERP that includes lessons learnt and training; 4. Develop an annual training program for awareness training for the ERP; and 5. Undertake a comprehensive roll-out of the ERP so that roles and responsibilities are communicated and understood.

5.0 Organisational Review

5.1 Strategic Direction

5.1.1 Observations

FRW's current Strategic Direction is defined in their 2016 Performance Plan as being:

VISION	Contribute to the region's liveability, growth and development by being a leading water and sewerage business;
MISSION	To effectively and reliably provide both sustainable, high quality water and sewerage services

Predominantly positive comments were received from Senior management within Rockhampton Regional Council (RRC) and FRW regarding the overall performance and direction of the FRW business unit. Based on contemporary benchmarking, it is a low cost provider with generally acceptable levels of service across a number of its business activities (with some exceptions such as sewer spills). They are making good progress towards this vision and mission, but there is a desire to take this performance to another level. This is a logical aspiration, given the range of future challenges and opportunities outlined in the previous section of this report.

Through the interview process and the initial workshop, senior management within RRC and FRW identified a range of future goals for FRW over a 5 to 10 year timeframe. These goals (which are outlined in the following table) would form a robust foundation for a new Strategic Plan for FRW. Some of these goals have already been realised (separate Brand and a Commercial Return to Council) and the remainder are work in progress. A high level gap analysis against these goals is also provided in the following table. This gap analysis provides a guide to the findings and recommendations in this report.

Category	Goals	Current State
General	To be a leading regional water authority Position FRW to provide optionality into the future	Leading in a range of indicators around cost and water supply Behind in a range of indicators relating to sewage FRW could be better positioned for the future by taking greater accountability for business outcomes
Customer / Brand	Retain the FRW Brand	Currently exists – to be retained
Financial Sustainability	Provide a Commercial return back to Council Price Plans underpinned by a robust risk based forward 20 year capital program	Commercial return currently provided Revenue base could be made more secure with some tariff reform (i.e. potentially Sewerage, Infrastructure Charges and Trade Waste) and active management of their meter fleet Price Plan supported by only a 10 year capital program – needs to be expanded & strengthened
Service Delivery / Asset Management	Robust risk based 20 year Asset Management Plans Achieve a more sustainable preventable/reactive maintenance split Improve resilience against future shocks (such as climate related change and incidents)	FRW has little ownership of the long term management of its assets Asset management and planning undertaken in other parts of Council Some good preliminary work being done on identifying future challenges and that needs to be expanded and mitigation plans put in place

Category	Goals	Current State
Organisational Capability	Realise the full potential of the FRW team Capitalise on technology to enable increased productivity and customer service	No structured people development plans Little use of technology and information analysis

5.1.2 Improvement Opportunities

FRW do not currently have a Strategic Plan, however in line with best business practice a Strategic Plan would generally sit over the top of the Performance Plan and provide longer term guidance for the business. Most Strategic Plans would be renewed on a 3 to even 4 yearly cycle and would have an outlook of at least 20 years and most likely even further. FRW's Performance Plan is the equivalent of a Business Plan for other businesses. This is renewed annually, with an outlook of between 3 to 5 years. Its primary purpose is to inform the annual budgeting process.

Ideally, FRW should consider having both documents, with the Strategic Plan being a simplified version outlining the way forward over a 20 year plus, time horizon. This document would link upwards to Council's Strategic Plan and downwards to the Performance or Business Plan which is prepared annually. The Strategic Plan allows FRW to have a longer outlook in its planning horizon to better position it to address the challenges and opportunities outlined above. It can also be used as a tool to communicate with FRW's key stakeholders, something the current Performance Plan is not well suited for.

5.1.3 Recommended Action Plan

Table 19 Action Plan – Strategic Direction

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
36	That FRW update its Strategic Direction having regard to the goals developed during the course of this assignment.	M	12 months	Revised Strategic Direction
37	That FRW consider creating a separate Strategic Plan that aligns with Council's Strategic Plan and sits over the top of and guides the annual Performance Plan.	M	12 months	1. Confirmation that a separate Strategic Plan is desirable to FRW 2. Disparate Strategic Plan for FRW

5.2 Operating Model

5.2.1 General

For the purpose of this report, the scope of what is referred to as the Operating Model, includes:

- Organisational structure;
- Accountabilities; and
- The form of FRW (e.g. "Commercialised" or some other form).

FRW currently is structured as a Commercialised Business Unit of Council. When formed over a decade ago, FRW was a more autonomous group and had its own strategic planning and asset management function. This has changed such that currently part or all of the following key functions are undertaken for FRW by other parts of Council:

- Asset Management;
- Infrastructure Planning;
- Input to Development planning and management.

The amalgamation and subsequent de-amalgamation has driven considerable change (operational and structural) within the Council. The de-amalgamation triggered a necessary focus on RRC's financial health. This impacted organisational capability right across Council and has continued to drive a strong centralised "Shared Services" model for Council.

5.2.2 Structure

There are two key considerations in respect of FRW's current structure:

1. It is presently primarily based on a separation of asset classes (Networks Services and Treatment Supply) rather than grouping of outputs however some overlap between the two structure types is observed;
2. It is structured and resourced to manage the business at an inputs level (primarily operations and maintenance and capital delivery activity) rather than in a manner that promotes accountability for some of the outcomes typically related to running a water supply and sewerage business (including Asset Management and Strategic planning).

A structure based on grouping of outputs would have the following advantages for FRW:

- It would overcome the inconsistencies in approach in the current structure across the two areas of treatment and networks (particularly in respect of planning and asset management);
- interactions with Council's shared service functions or external stakeholders potentially more efficient and effective;
- Disciplinary structures allow the separation of tasks that have different planning horizons, such as asset management (typically 20 or more years) and operations and maintenance (generally with a rolling annual outlook).

As discussed in the following section, FRW should also take greater accountability for business outcomes such as asset management and planning, commercial performance and people management. It is also noted that FRW has made limited progress on introducing technology and related innovation into the business (beyond its SCADA system). Accordingly it is recommended that the strengthening of these activities within FRW should be considered in any restructure.

Having regard to the above observations, it is recommended that FRW be restructured along the following lines. FRW and Council management would be best placed to determine a detailed structure and how best to resource that structure.

Asset Management and Planning	Operation / System Control	Maintenance	Capital Delivery	Business Support
• Asset Custodianship for FRW • AM Plans • Forward Capital Planning (20 years) • Forward Maintenance Planning • Data Inegrity • Network Model	• Operations (Treatment and Networks) • SCADA • Water Quality • Trade Waste • Emergency Management	• Reactive / Minor Scheduled Maintenance • Mech Elect • Civil • General Facilities • Dispatch / Maintenance Planning	• Construction • Major / Complex Maintenance • Project / Contract Management • Private Works	• Commercial Performance and Business Development • People Management • Technology • Innovation • Meter Reading • Adminstration

In respect of Council's overall structure, the current arrangement with FRW reporting directly to the GM Regional Services appears to function well and should not be altered. Furthermore, and consistent with the recommendation for FRW to take greater accountability for its business outcomes, it is strongly recommended the business unit be retained as one entity.

5.2.3 Accountability

Council currently utilises a Purchaser/Provider model for structuring and running its operations i.e. discrete departments within RRC is a provider of shared services to FRW the Purchaser). It is recommended that FRW continues with the use of this model as it has a number of benefits such as:

- Allowing for a clear delineation and grouping of tasks that have different planning timeframes or horizons. This is important for the proper functioning of these various entities. A group with long term planning responsibilities (such as Asset Management) can be seriously distracted from day to day activities such as maintaining data accuracy or GIS information or operations and maintenance.
- In a complex business such as Council, it allows the necessary separation of tasks that are unique (such as the water and sewerage business which has its own income stream), and the aggregation of tasks that are common across the organisation (such as financial services or human resource management).
- This separation allows both the necessary focus and specialization where required, and the economies of scale (and arguably scope) from aggregating common tasks. The aggregated common tasks are often referred to as "Shared Services".
- This approach also provides a clear delineation between the *purchaser* of services and the *provider*. In the case of Council, the relationship between these two groups is formally set out via "Service Level Agreements" (SLA). FRW who is the purchaser of a wide range of services from Council, has a detailed SLA specifying their requirements in this regard.
- Finally, the model allows an organisation to clearly define what is core business and thus to be self-provided (i.e. the purchasing functions) and what could be outsourced. Where "purchased" services are self-performed, it also allows provides the capacity to benchmark the performance of these internal providers.

One of the challenges with the Purchaser/Provider model is that the relationship between the two groups can become inverted. That is the provider, often due to its size or aggregated expertise, dictates the outcomes from the relationship (this is often seen with IT service providers for instance). The Purchaser in turn can inadvertently "outsource" the specifying responsibility to the provider and not be an intelligent and informed procurer of these services. The implications are that internal compliance drive business decisions, instead of the customer or business needs. This may lead to businesses losing their way and customers and key stakeholders to becoming seriously disenfranchised.

It appears that FRW are currently operating with a comparatively low level of accountability for a business undertaking of this size. Using the "Levels of Accountability" model below as a guide, FRW are generally operating at the "inputs" level, being the lowest level of accountability. As a result, it appears that FRW are not acting as an informed purchaser of services and not managing the water and sewerage function at a business activity level. There is an opportunity for FRW to add greater value to RRC and its customers if it manages at the "activities" and "outputs" level. This will also help FRW better meet future challenges. This view was also largely supported during the interview process undertaken for this project.

It is therefore recommended that as part of the above restructure, Council undertake a review of the respective accountabilities of FRW and their service providers across Council, with a view of elevating FRW's responsibilities to managing at the "activities" and "outputs" level. In particular, FRW should have greater accountability with respect to the following outcomes:

- Customer service and associated service standards;
- Asset management and planning;
- Development planning and control;
- Finance and commercial management;
- People management.

Resetting these accountabilities should not mean that FRW takes over the delivery of these services. That said, it may be determined that specialised services such as process design are better placed in FRW, whereas the generic services could be more productively provided by the Central Design group. To guide this realignment of accountabilities, it is recommended that Council and FRW use a structured methodology such as RACI (Responsibility, Accountability, Consulted and Informed). The scope of the realignment needs to include FRW and its internal service providers.

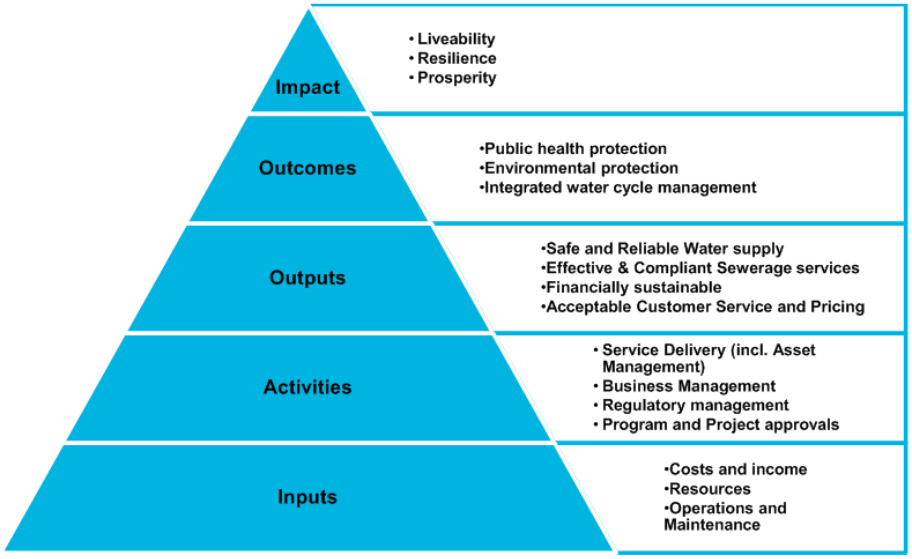


Figure 25 Levels of Accountability

5.2.4 Form of Business Unit

In June 2009, under the Local Government Act, Council resolved to nominate FRW as a Significant Business Activity. Queensland Treasury documentation outlines the following attributes for a Significant Business Activity:

Principles

- Competitive neutrality;
- Clear and non-conflicting objectives;
- Management responsibility, authority and autonomy;
- Accountability for performance.

Responsibilities

- Efficient market pricing;
- Quantity and quality of service output;
- Staff resources and delegations;
- Asset management.

As nominated previously, it is recommended FRW take greater accountability for outcomes relating to its business. Notwithstanding this, there is agreement with the view of RRC senior management that there is little benefit in FRW continuing to be formally recognised as a Commercialised Business Unit. Commercialisation is arguably a stepping stone to either privatisation or legal separation, and neither of these options are currently being contemplated for FRW. Commercialisation brings with it additional obligations in terms of reporting and potentially sets the business unit up with conflicting objectives to the broader Council.

It is recommended that RRC consider the feasibility of "down-grading" the status of FRW to a discrete business unit, which still complies with "Full Cost Pricing" principles. This still allows FRW to achieve financial self-sufficiency through a separate water and sewerage charging regime, provide a commercial return to Council and maintain its own Brand, both of which are desired outcomes for the business unit. Prior to embarking on such an

action, it would be important for Council to obtain its own legal advice and consult with the appropriate agencies on the feasibility of proceeding down this path.

It is worth noting that this should not be regarded as a high priority in the context of other recommendations made in this report.

5.2.5 Recommended Action Plan

Table 20 Action Plan – Operating Model

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
38	That the FRW structure be realigned based on grouping of outputs to help enable FRW to be accountable key activities relating to being a water supply and sewerage business activity	H	6 months	1. Utilising a methodology such as a RACI (Responsibility, Accountability, Consulted and Informed) Analysis, Council reset FRW's overall Accountabilities (and that of Council's relevant service providers) such that FRW manages the water supply and sewerage business at the "Activities" and "Outputs" levels 2. Consideration to any related changes also be made to the support service functions across Council
39	That Council investigates the feasibility of amending the status of FRW from a Significant Business Activity to a "Discrete Business Unit of Council" complying with "Full Cost Pricing" principles.	L	12 months	1. Consult with the Department of Local Government to understand the mechanisms for change 2. Seek independent legal advice; 3. Assess the overall benefits to Council/FRW for change.

5.3 Governance

5.3.1 Observations

This section provides an overview of and recommendations on the governance arrangements for FRW. There is a strong relationship between this topic and considerations around organisational structure and functions. High level observations about the current state of the governance framework for FRW include:

- Organisationally FRW reports directly to the General Manager of Regional Services, who in turn reports to the CEO;
- In addition to FRW, the GM Regional Services is also responsible for solid waste, civil operations, engineering and development and building;
- At the Council level, FRW reports to the Airport, Water and Waste Committee. Presumably this Committee is intended to bring oversight to the commercial activities of the Council;
- It is noted that other elements of the water cycle such as flooding, stormwater management and waterway health, are overseen by another Committee of Council, being the Infrastructure Committee;
- It is acknowledged that Council have recently reinstated the WOCAM Committee with the aim of strengthening the approach to Asset Management and decision-making across Council;
- It is noted that some Councils such as Mackay Regional Council have Advisory Committees as an adjunct to the Council oversight. This has the benefit of bringing different skills and perspectives to the governance process. In the case of Mackay this Advisory Committee relates to Infrastructure and Asset Management.

Good Governance is about the processes for making and implementing good decisions. A good governance framework should align the considerations and aspirations of RRC's customers, community, Council, management and staff. The Good Governance Guide website for Local Government, cites the following characteristics of Good Governance:

- Accountability;
- Transparency;
- Legislative and regulatory compliance;
- Responsiveness;
- Equitable, inclusive and participatory; and
- Effectiveness and efficiency.

5.3.2 Improvement Opportunities

5.3.2.1 FRW's Organisational Reporting Lines

While the scope of this review has been limited to FRW and its arrangements, it would appear that Council's governance frameworks go a considerable distance towards achieving these characteristics.

To this end, it is recommended retaining the current organisational reporting arrangements for FRW, being directly to the GM Regional Services. The alternative options would be to either have:

1. FRW reporting to the CEO; or
2. To disband FRW into functional component parts and spread it across other groups of Council.

In terms of the first option, this may be inefficient as it would dilute the CEO's effectiveness by unnecessarily broadening his direct responsibilities. In terms of the second option, it is considered important for FRW be retained as a business unit and be made *more* accountable for delivering outcomes relating to the water supply and sewerage business, not less.

5.3.2.2 Council's Organisational and Board Committee Structures

Outside of these structural considerations, there may be other opportunities to make the governance arrangements more *efficient and effective*. This is by considering:

1. More integrated decision making; and
2. Injecting other expertise and perspectives into the decision making process.

In terms of the first issue, it is noted that other jurisdictions are seeing material financial and service delivery benefits from planning and making asset investment decisions at a more integrated and strategic level. In FRW's case, this means having regard to whole of water cycle outcomes, rather than just optimising within the water supply and sewerage element of the water cycle.

it is recommended that Council should consider either establishing a Board Sub-Committee and/or an Organisational Steering Committee that would have oversight of planning across the whole of the water cycle, with the objective of driving more holistic, optimal and cost effective decision making in that regard. This more integrated approach to governance across the water cycle, should drive greater effectiveness and efficiency. It will encourage groups within the organisational structure of the Council to work closely with one another to seek out these opportunities to save money and improve outcomes for the community they serve. The recently reinstated WOCAM Committee may address this requirement and should be reviewed prior to establishing a new committee.

This change in governance may not bring about an immediate change in approach to the way RRC plans its investments across the whole of the water cycle, but would set tone for a longer term transition to a more integrated approach.

5.3.2.3 External Advisory Committee

With respect to injecting other perspectives and expertise into the decision making process, this approach is used widely through local government and government enterprises more broadly. These skills are typically brought in via Advisory Committees. The focus of such Committees depends upon the need of the Council. In RRC's case, it is evident that it would benefit from additional perspectives and expertise relating to Asset Management, across all asset types. Mackay Regional Council has in place similar Committees for both its water and infrastructure businesses.

It is therefore recommended that RRC consider introducing a similar committee that would:

- Assist with the oversight of Council's entire Asset base including its Asset Management Programs, Asset Planning, Service Level planning and the necessary supporting people and system capability;
- Bring complimentary skills and alternative perspectives to the management of these assets;
- While not being granted any delegated authority, make recommendations to Council and its officers around opportunities for improving the management of its assets.

A draft terms of reference is provided in Appendix C for Council's consideration. Alternative options to this proposed scope would be:

- To just have the Advisory Committee focus on FRW's activities; or
- To have the Advisory Committee focus on the capital delivery element of the asset life cycle, but across all asset types of Council.

5.3.3 Recommended Actions

Table 21 Action Plan – Governance

No.	Recommended Action	Priority	Time-frame	Benchmark / Evidence of Completion
40	That Council consider establishing an "Asset Management Advisory Committee" to assist it with the oversight of managing its entire asset base	M	6 months	1. Determine the outcomes that RRC/FRW are seeking for the Advisory Group; 2. Consider whether the advisory group is at Council level or at committee level; 3. Develop a proposed Term of Reference for the Advisory Group;
41	That Council consider either establishing a Board Sub-Committee and/or an Organisational Steering Committee that would have oversight of planning across the whole of the water cycle, with the objective of driving more holistic, optimal and cost effective decision making in that regard	M	18 months	1. Review success of WOCAM committee and ability to meet these requirements and if unsuccessful proceed with the following. a. Consider the Council restructuring/reporting requirements for this to occur; b. Prepare a Terms of Reference for the committee/sub-committee and workshop with Councillors/Senior Staff;

6.0 Conclusions and Recommendations

The Recommended Action Plans nominated in this report were collated based on the collective input from Councillors, senior Council staff and FRW staff, documentation received from FRW and a benchmarking analysis. The review generally reflects that FRW is a commercially sound business unit of Council that delivers an appropriate level of service to the community, which is evidenced by:

- Positive Economic Real rate of Return that is also higher than peer NQ/CQ peer Councils;
- Regular compliance with Customer Service Standards;
- Commendable disaster response in particular the aftermath of TC Marcia;
- Compares favourably in a high number of benchmarking parameters against national, state and NQ/CQ peer Council's;
- Very positive feedback from FRW staff through the staff survey relating to a range of measures, including asset management, safety, etc; and
- High community satisfaction as evidenced by comments from Councillors from their constituents as well as the annual customer surveys undertaken by RRC.

During interviews and workshops with Councillors and Senior staff, Council were committed to developing FRW into a leading regional water authority. In order to fulfil this commitment, a number of Action Plans have been recommended across a number of different categories with a timeline for completion. These Recommended Action Plans have been summarised below along with a number of discrete benchmarking tasks that enable Council to track completion of the Action Plans.

Table 22 Action Plan – Summary

No.	Review Section	Recommended Action	Priority	Timeframe	Benchmark / Evidence of Completion
01	Service Delivery - Benchmarking	Maintain (or continue to improve performance) current high level performance in the following Benchmark Parameters: Sewerage Capital Expenditure ($/property) Operating Cost – Sewerage ($/property) Typical Residential Bill – Sewerage ($) Economic Real Rate of Return – Sewerage (%) Water supply capital expenditure ($/property) Operating costs – Water ($/property) Typical residential bill – Water ($) Economic Real Rate of Return – Water (%) Typical Residential Bill – Water & Sewerage ($) Combined operating cost: water and sewerage ($/property) Improve performance in the following benchmark parameters: Number of sewerage main breaks and chokes per 100 km of sewer main No. of sewage overflows reported (per 100 km sewer main) Number of water main breaks per 100 km of water main Real water losses (litres/service connection/day) No. of water & sewerage complaints (per 1,000 connections)	L	18 months	- Consider overall cost benefits to FRW for improvement in Benchmark Reporting; - Update Customer Service Standards with more Stringent targets; - Continue participation in benchmarking assessment; and - Undertake review of benchmark performance against peer groups (nationally and state-wide.
02	Service Delivery -Water Quality	Revise Hazard / Risk Assessment in DWQMP	M	12 months	- Re-convene Risk Assessment Workshop with key staff - Amend mitigation measures in order to further reduce risk of occurrence of non-compliances/prescribed incidences reported in 2014/15 - Consider revising Hazard Assessment to cover incidences/water quality complaints that occurred following TC Marcia
03	Capabilities / Resources Assessment - People Management	FRW be considered a high priority as part of the role out of Succession and Talent Management plans for the whole of Council.	H	6 – 12 months	- The general training and development needs of staff; - Growing the leadership capability of people in key management roles; - Identifying key roles within FRW and having clear succession plans for these roles; - The future resourcing and capability needs of the business - Consider the adoption of a structure apprentice and graduate program for FRW and Council more broadly.
04	Capabilities / Resources Assessment - Resources	Review and address resourcing gaps in the current and new organisational structure of FRW.	H	3 months	- Develop in consultation with the General Manager of Regional Services, a strategy for addressing these resourcing gaps
05	Operational Processes - Safety	Incorporate a "Safety Culture" approach.	M	12 months	- Complete RRC organisational Culture Development Program and other associated campaigns focused on safety. - Re-survey FRW staff to ensure improvement in perception / attitude towards Council's management of safety; - Undertake a targeted FRW campaign surrounding the Safety Culture approach if required.
06	Operational Processes - Technology	Update Asset Management Plan to include framework for identification of future SCADA renewal / upgrade.	M	6 months	- Asset Management Plan updated to include SCADA renewal / upgrade framework and new revision approved.
07	Operational Processes - Technology	Review asset register to ensure all SCADA infrastructure is included and up-to-date.	M	6 months	- Asset register reviewed and updated with all SCADA information.
08	Operational Processes - Technology	Investigate and if found feasible prepare a business case for the implementation of mobile computing.	L	24 months	- Results of investigation into mobile computing / business case reviewed and approved by Manager FRW.
09	Operational Processes - Asset Management	Progress **AM Policy Development** from "Core-Intermediate" to "Advanced"	M	5 years	- Review the Asset Management policy to make it succinct. - Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain: • Asset Management objectives; • the scope of the Asset Management System; • the relationship between organisational objectives and asset management objectives; and • define the framework required to achieve the asset management objectives.

No.	Review Section	Recommended Action	Priority	Timeframe	Benchmark / Evidence of Completion
10	Operational Processes - Asset Management	Progress Levels of Service and Performance Management from 'Intermediate' to 'Advanced'	M	5 years	- Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period.
11	Operational Processes - Asset Management	Progress **Demand Forecasting** from 'Intermediate' to 'Advanced'	M	5 years	- Revise Asset Management Plans to provide: • water and sewer demand forecasts including difference demand scenarios; • risk assessments and identification of demand gaps for each scenario; and • risk mitigation measures / asset and non-asset solutions for addressing demand gaps.
12	Operational Processes - Asset Management	Progress **Asset Register Data** from 'Core' to 'Advanced'	M	5 years	- Develop and implement asset data collection program for inclusion in the Asset Management Plan.
13	Operational Processes - Asset Management	Progress **Asset Condition** from 'Core' to 'Advanced'	M	5 years	- Develop and implement a condition assessment strategy for all water and wastewater assets.
14	Operational Processes - Asset Management	Progress **Decision Making** from 'Basic' to 'Core'	M	5 years	- Refer CAP01 within Capital Planning and Delivery section..
15	Operational Processes - Asset Management	Progress **Risk Management** from 'Basic-Core' to 'Intermediate'	M	5 years	- Develop and apply methodology for assessing all water and wastewater assets criticalities. - Undertake formal asset risk assessment. - Amend Asset Management Plans to include a section on risk assessment. Section to include a summary of the formal asset risk assessment process and findings.
16	Operational Processes - Asset Management	Progress **Operational Planning** from 'Core' to 'Intermediate-Advanced'	M	5 years	- Undertake formal asset risk assessment. - Develop improvement plan and assessment criteria for all operational processes.
17	Operational Processes - Asset Management	Progress **Capital Works Planning** from 'Basic-Core' to 'Intermediate'	M	12 months	- Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects (refer action no. 25). - Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels (refer action no. 26)
18	Operational Processes - Asset Management	Progress Financial and Funding Strategies from 'Basic' to 'Core'	M	5 years	- Amend Asset Management Plans to include data confidence levels and assumptions made for the valuations and financial forecasts.
19	Operational Processes - Asset Management	Progress **AM Teams** from 'Core' to 'Advanced'	M	5 years	- Complete a formal review of current Asset Management resourcing, roles (position descriptions) and gaps in requirements. Develop in consultation with the General Manager of Regional Services, a plan for addressing these gaps.
20	Operational Processes - Asset Management	Progress **AM Plans** from 'Basic' to 'Intermediate'	M	5 years	- Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period. - Revise Asset Management Plans to provide: • water and sewer demand forecasts including difference demand scenarios; • risk assessments and identification of demand gaps for each scenario; and • risk mitigation measures / asset and non-asset solutions for addressing demand gaps. - Amend Asset Management Plans to include a section on risk assessment. Section to include a summary of the formal asset risk assessment process and findings. - Amend Asset Management Plans as per the following: • Within the Lifecycle Management Plans section , separate asset information into its own section (to follow Levels of Service); • Asset description section to include information on asset attributes, condition, performance, criticality and valuations; • In relation to lifecycle strategies, provide information on current and future routine and non routine maintenance; and • include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.
21	Operational Processes - Asset Management	Progress **Management Systems** from 'Basic' to 'Core'	M	5 years	- Develop a Quality Management System for asset management and project delivery. Including the following as discussed in the Capital Planning and Delivery section: • Review of Technical Specifications; • Quality control framework for works constructed internally; • Framework for project management / delivery framework; and • standardised templates, forms and processes for Contract Administration / Management - Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain:

No.	Review Section	Recommended Action	Priority	Timeframe	Benchmark / Evidence of Completion
					• Asset Management objectives; the scope of the Asset Management System; • the relationship between organisational objectives and asset management objectives; and • define the framework required to achieve the asset management objectives.
22	Operational Processes - Asset Management	Progress **Information Systems** from 'Core' to 'Intermediate'	M	5 years	- Investigate potential for integration of GIS into Asset Management System.
23	Operational Processes - Asset Management	Progress **Service Delivery Mechanisms** from 'Core' to 'Intermediate'	M	5 years	- Refer Capital Planning and Delivery section.
24	Operational Processes - Asset Management	Progress **Improvement Planning** from 'Aware' to 'Advanced'	M	5 years	- Amend the Asset Management Plans to include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.
25	Operational Processes - Capital Planning and Delivery	Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects.	M	12 months	- Capital Works Prioritisation Methodology document reviewed and approved by Manager FRW. - All projects forecast within the next five (5) years to be reviewed and re-prioritised using methodology.
26	Operational Processes - Capital Planning and Delivery	Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels.	M	12 months	- Projects forecast within: • Next 3 years – fully scoped and estimated • 3-5 years - formal options analysis and business cases developed for major projects. High level project scopes and estimates for all projects • 5-20 years - concept scopes and estimates prepared using staff experience and available industry information
27	Operational Processes - Capital Planning and Delivery	Carry out an annual review of projects scopes and estimates and provide more detail / confidence as project move into different forecast periods.	M	Ongoing	- As above.
28	Operational Processes - Capital Planning and Delivery	Develop a detailed Capital Project Delivery resourcing plan for the next 5 years incorporating internal and external resources	H	3 months	- 5 year capital works project delivery resourcing plan document reviewed and approved by Manager FRW.
29	Operational Processes - Capital Planning and Delivery	Improve / develop more robust capital project delivery plan for 2016 /17 financial year	H	3 months	- 2016/17 Capital works project delivery plan document reviewed and approved by Manager FRW
30	Operational Processes - Capital Planning and Delivery	Hold regular (fortnightly / monthly) capital project delivery meetings with all project delivery staff	M	12 months	- Regular (fortnightly / monthly) capital project delivery meetings with all project delivery staff held over the last 12 months.
31	Operational Processes - Capital Planning and Delivery	Incorporate options for Project Management accreditation (i.e. under Australian Institute of Project Management (AIPM))	L	18-24 months	- Key project delivery staff on pathway to AIPM accreditation.
32	Operational Processes - Capital Planning and Delivery	Provide internal training on Council procurement systems and requirements for Project Delivery staff.	L	6-12mo	- All project delivery staff has completed Council procurement systems training.
33	Operational Processes - Capital Planning and Delivery	Provide internal, external and on the job Contract Administration / Management training for Project Delivery staff.	L	12 months 12-24 months	- Project delivery staff on high risk / major projects have completed formal Contract Administration / Management training; and - All other project delivery staff have completed either informal or formal Contract Administration / Management training.
34	Operational Processes - Capital Planning and Delivery	Integrate formalised project closure and review procedures into medium to high risk projects.	H	12 months	- Standard project closure procedures have been developed and documented; and - All medium to high risk projects completed within the designated timeframe have undergone project closure / review procedures.
35	Operational Processes - Emergency Management	Revise, finalise and implement an Emergency Response Plan	H	6 m	- Incorporate Lessons Learnt from TC Marcia and other recent events; - Work with RRC procurement to identify critical equipment/services for disaster management and include in ERP; - Prepare a final ERP that includes lessons learnt and training; - Develop an annual training program for awareness training for the ERP; and - Undertake a comprehensive roll-out of the ERP so that roles and responsibilities are communicated and understood.
36	Organisational - Strategic Direction	That FRW update its Strategic Direction having regard to the goals developed during the course of this assignment	M	12 months	- Revised Strategic Direction

No.	Review Section	Recommended Action	Priority	Timeframe	Benchmark / Evidence of Completion
37	Organisational - Strategic Direction	That FRW consider creating a separate Strategic Plan that aligns with Council's Strategic Plan and sits over the top of and guides the annual Performance Plan.	M	12 months	- Confirmation that a separate Strategic Plan is desirable to FRW - Disparate Strategic Plan for FRW
38	Organisational - Operating Model	That the FRW structure be realigned based on grouping of outputs to help enable FRW to be accountable key activities relating to being a water supply and sewerage business activity	H	6 months	- Utilising a methodology such as a RACI (Responsibility, Accountability, Consulted and Informed) Analysis, Council reset FRW's overall Accountabilities (and that of Council's relevant service providers) such that FRW manages the water supply and sewerage business at the "Activities" and "Outputs" levels - Consideration to any related changes also be made to the support service functions across Council
39	Organisational - Operating Model	That Council investigates the feasibility of amending the status of FRW from a Significant Business Activity to a "Discrete Business Unit of Council" complying with "Full Cost Pricing" principles.	L	12 months	- Consult with the Department of Local Government to understand the mechanisms for change - Seek independent legal advice; - Assess the overall benefits to Council/FRW for change.
40	Organisational - Governance	That Council consider establishing an "Asset Management Advisory Committee" to assist it with the oversight of managing its entire asset base	M	6 months	- Determine the outcomes that RRC/FRW are seeking for the Advisory Group; - Consider whether the advisory group is at Council level or at committee level; - Develop a proposed Term of Reference for the Advisory Group;
41	Organisational - Governance	That Council consider either establishing a Board Sub-Committee and/or an Organisational Steering Committee that would have oversight of planning across the whole of the water cycle, with the objective of driving more holistic, optimal and cost effective decision making in that regard	M	18 months	- Review success of WOCAM committee and ability to meet these requirements and if unsuccessful proceed with the following. • Consider the Council restructuring/reporting requirements for this to occur; • Prepare a Terms of Reference for the committee/sub-committee and workshop with Councillors/Senior Staff.

Appendix A

Workshop Outcomes

Appendix A Workshop Outcomes

Initial Workshop Outcomes

Review Objectives and Drivers	
- Optimising of resources across council - Benchmarking - Understanding of other structures - Resolution of current challenges - Sustainable platform for future / stability - Explore FRW & RRC's contribution to / role in community liveability	- Accountability for outcomes & clarity on and operational model to support that (effectiveness of current model) - Clarity of systems & processes between FRW & key stakeholders - Clarity on efficiency & effectiveness of FRW in relation to service standards - Road map for improvement - Skills / capabilities within FRW

What does a successful FRW look like?		
Returns - Commercial Return into future - Continue full cost pricing - 20 year outlook / major capital investments - Grow revenue (maximise) base & customer base	**Asset Management** - Accountable for Asset Management - Risk based model for decision making - Continued optimisation of resources & value for money - Review effectiveness - Service standards • both customer & engineering driven • value for customers	**Customer Service Standards** - Brand – keep (the current split works) - High performing culture & aligned with RRC's values - Greater clarity around governance & accountability - FRW's role in broader RRC - Contribute to total water management & liveability

What is FRW's current state with respect to those goals?		
Returns - Currently have a commercial return - Need a risk framework on financial planning - Need capital estimates beyond 5 years (cost and risk) - Prices oversight from state • Just need to do prices correctly / transparency so any impact from third party can be min. impact • Grow revenue	**Asset Management** - Is PIP linked in? - Currently have 10 year plan - FRW is the asset owner & responsible for operation • Planning for Network Service done by assets • FRW does planning for Treatment and Supply • Risk – separated by asset type - Service Standards • Engineering driven • Customer expectation based on historic data - FRW is currently partially aligned with AM policy but not completely	**Customer Service Standards** Governance - Current council governance doesn't allow sufficient oversight of business activities - not a clear accountability within the business outcomes - only control over part of the service chain Culture / People - Good but bit of 'us' & 'them' - Push back on corporate - Lack of clarity on some shared services functions - EG Delivery of efficient water & sewerage services to region Role in Other Council Outcomes - Other parts of the water are struggling - Current Council focus compliance not outcomes Brand - Recognition of brand is good - Brand of convenience

\\aurok1fp001\Projects\604x\60480720\8. Issued Docs\8.1 Reports\160919 FINAL FRW Operational Review Report (V3)\160920 FINAL Fitzroy River Water Operational Review Report (V3).docx
Revision 3 – 20-Sep-2016
Prepared for – Rockhampton Regional Council – ABN: 59 923 523 766

What is FRW's current state with respect to those goals?		
		Operating Model - Not operating as a commercialised business unit - No performance plan - Business outcomes in Council Operational Plan

What are the key challenges (now and in future)?		
Returns - Regional water – LSC /GAWB - Bulk sales / raw water / spare capacity - Truck waste monitoring & regulation - Meter replacement program – currently age rather consumption - System leakage – not a huge financial driver, more about long term security / delay future upgrades - As per sewerage – good opportunity to defer future - Need a change of system monitoring sewerage eg. Pedestal - May be opportunity with allowances	**Asset Management** - Breaching licence standards* - EPA Requirements are currently not considered in AM - Funding & Resources (AM – FRW – Design) - Disconnect between AMP & budged allocated (risk) - Combining resources • Stormwater with water and sewer construction • Already happening shared utilisation of equipment & plant - Alignment with AM policy - Defining FRW's core role	**Customer Service Standards** - Governance • barrier to FRW being involved in broader council issues • insufficient expertise in key decision making

What change is required to achieve those goals?		
Returns - Risk adjusted • financial includes +20 years outlook • Political/Gov • Estimating risk • Regulating risk eg log & limit licence - AMP to provide more detail over how capital works are prioritised - Capture the risks of optimal timing versus approved timing - Potential for water/sewerage advisory board to Council provides opportunity to defer political risk (eg Mackay model) - Well-considered meter replacement program - Continuing system leakage program - Future feasibility of business opportunities with other Councils - In next 2 years look at tariff for sewerage.	**Asset Management** - Yearly review of AM (Consider risk of future standards – good position currently) and link with PIP & long term FP - 20 year plan – identify major Capital Expenditure & how this will be funded - Look at alternative delivery models for Capital Works - Full implementation of current AM policy - Review of delivery cycle • responsibility & accountability for delivery • more dedicated resources • forward planning • program management - Review of service standard - Develop strategy for defining and continued optimisation of FRW's core role	**Customer Service Standards** Governance - Potential Infrastructure Advisory board Culture / People - Shared service planning - Training / development - Talent & successful planning Operating Model - More accountable for business outcomes (shift from inputs to outcome)

Parking Lot
- Previous studies into the operation of FRW were completed in 2005 and 2009 – AECOM to request a copy.

Second Workshop Outcomes

The primary outcome of the second key RRC and FRW staff workshop was discussion surrounding findings of the preliminary Asset Management Maturity Assessment. A key recommendation in this review and goal identified by key RRC / FRW staff is movement of FRW's Asset Management systems to general alignment with the requirements of ISO55000 and the International Infrastructure Maintenance Manual (IIMM). The preliminary findings of the assessment against these standards were discussed and the assessment and target goals for each category under the IIMM were revised based on additional information provided by staff and these discussions. Refer to the Asset Management Section for the complete Asset Management Maturity Assessment and recommended actions for improvement to meet the established asset management goals.

Initial Water, Waste and Airport Committee Presentation Outcomes

FRW Future Vision and Review Objectives
- Would like to see clear recommendations that they can benchmark against . - Regarding the 20 year outlook: • FRW currently only provides a10 year budget forecast. A 20 year plan might be difficult as there may be a lot of uncertainty. • How is / would this be reflected in planning documents? • Major sewer infrastructure currently considers a 20 year forecast. - Would like to see other business opportunities incorporated into future planning / town plan including: • Barrage (FRW has a role in this); • future weirs; and • supply pipeline to Gladstone.

Customer Service Standards
- There have been issues raised in local election regarding surcharges in sewer network. - Regarding FRW as a whole: • FRW have made good progress but could always do better and increase efficiencies. • FRW is well run, makes profit and generally speaking the Gracemere area is happy with service provided. • Both good and bad stories are heard (generally good) and there is always room from improvement. - Believe the region's water is affordable. - Regarding emergency management the loss of water to Frenchville following TC Marcia was raised and should be considered and believes there should be allocation of Capital funding and planning to ensure issues like this won't happen again. - Doesn't believe that RRC / FRW sell their product / the good job they do enough. I.e. could message to the public. About all the great work that was done and is being done on upgrades and risk mitigation. The community needs to see what FRW are doing.

Governance
- Council are currently looking into the legislative requirements for moving away from Commercialised Business Unit. - Believes that Advisory Committee would be of value and wants to revisit.

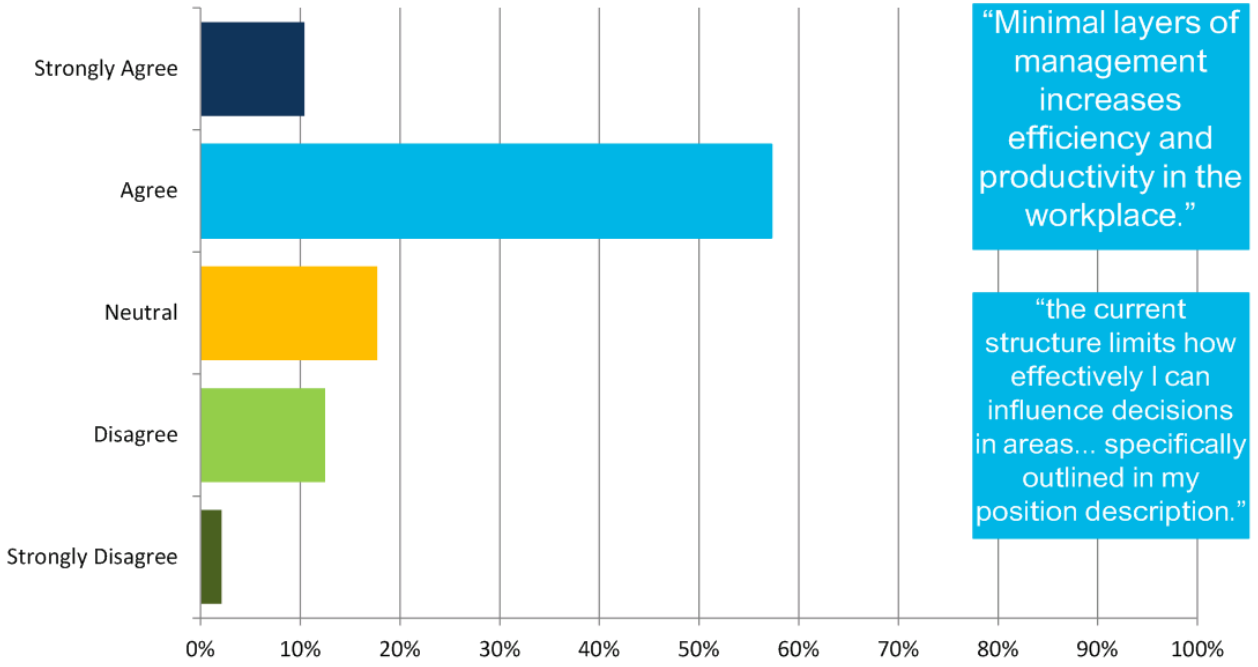
Accountabilities / Structure
- Innovation needs to be included – who is looking at best and smartest way to do things, clever use of data / technology (need appropriately qualified personnel to do this). - Business support – would this be internal to FRW or within RRC (share d service)?

Appendix B

Staff Survey Results

Staff Survey Results

1) The current organisational structure of Fitzroy River Water allows me to effectively undertake my duties/role.



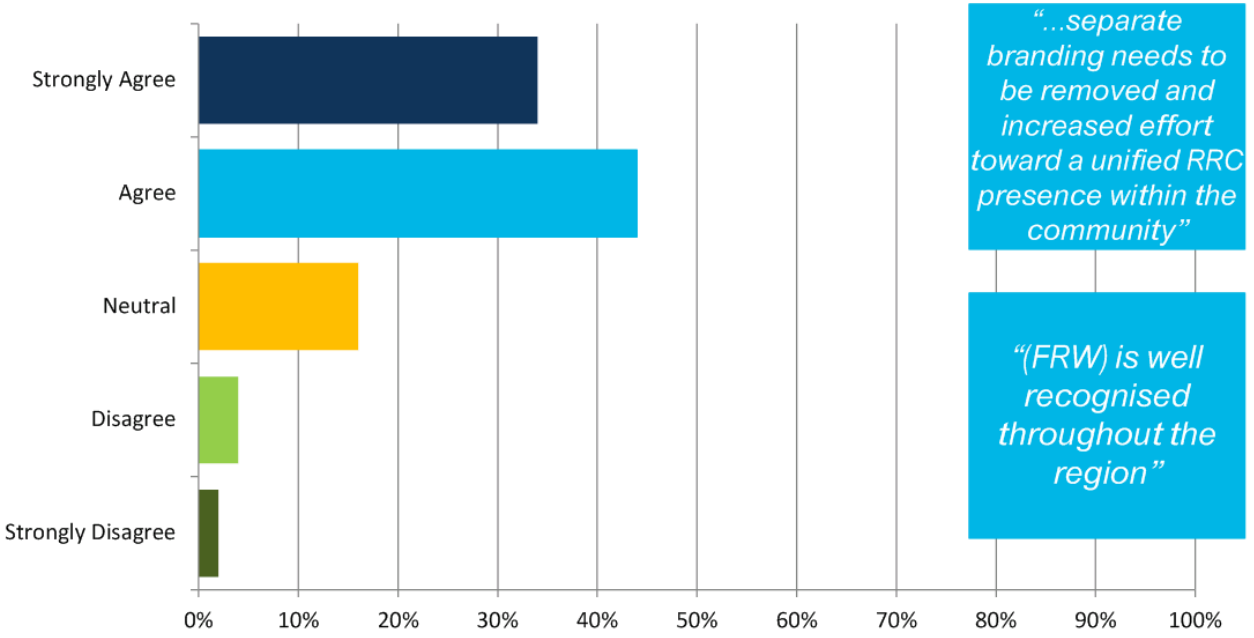
"Minimal layers of management increases efficiency and productivity in the workplace."

"the current structure limits how effectively I can influence decisions in areas... specifically outlined in my position description."

AECOM

Staff Survey Results

2) The brand and logo of Fitzroy River Water should be retained by Rockhampton Regional Council for its water and wastewater operations department / business unit.



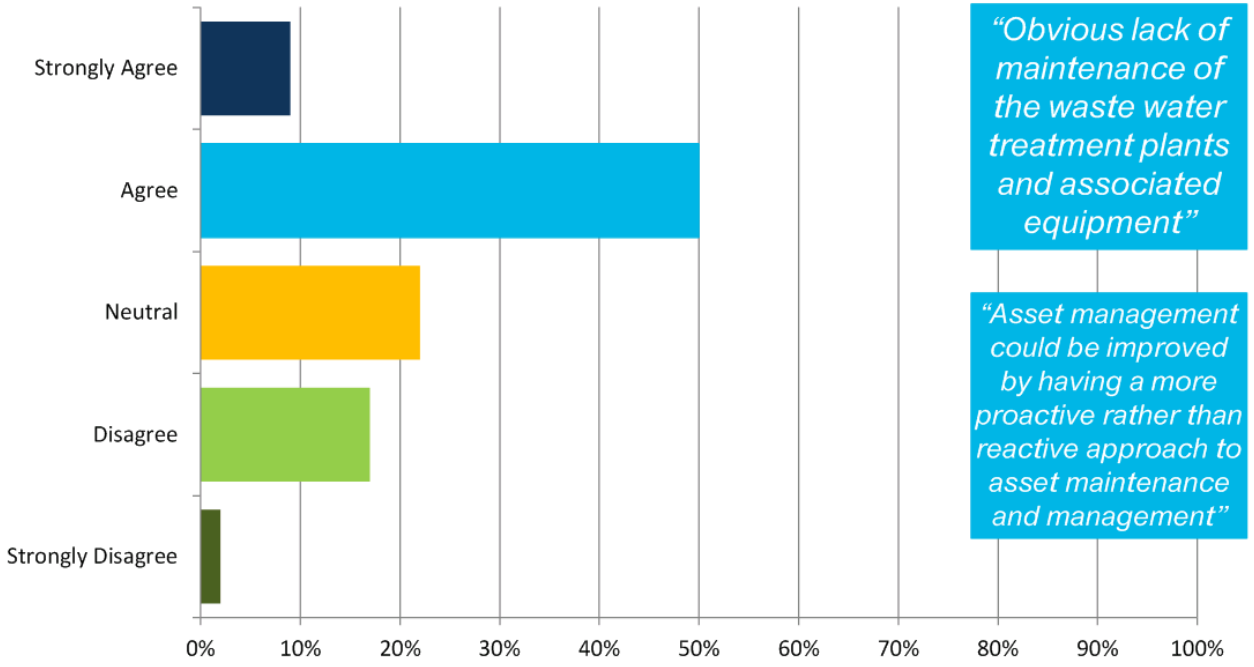
"…separate branding needs to be removed and increased effort toward a unified RRC presence within the community"

"(FRW) is well recognised throughout the region"

AECOM

Staff Survey Results

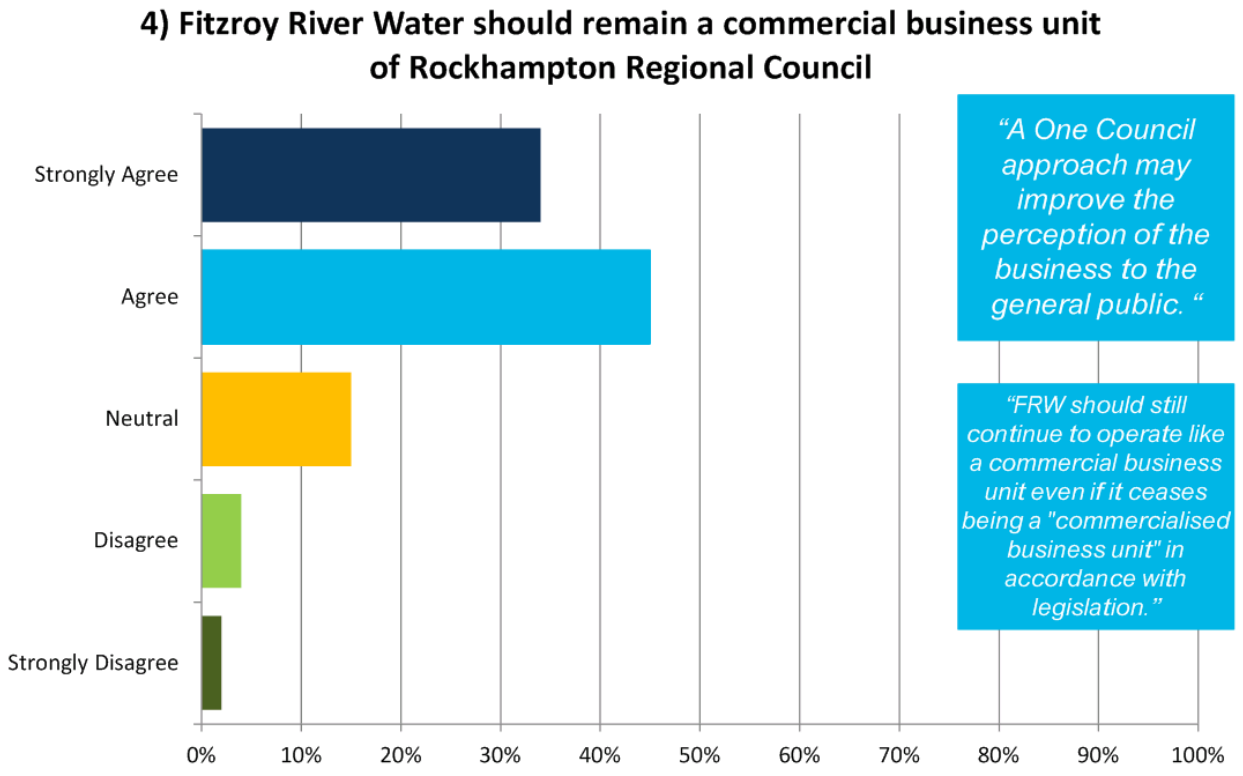
3) Fitzroy River Water effectively maintains and manages its assets to meet the current and future needs of its customers.



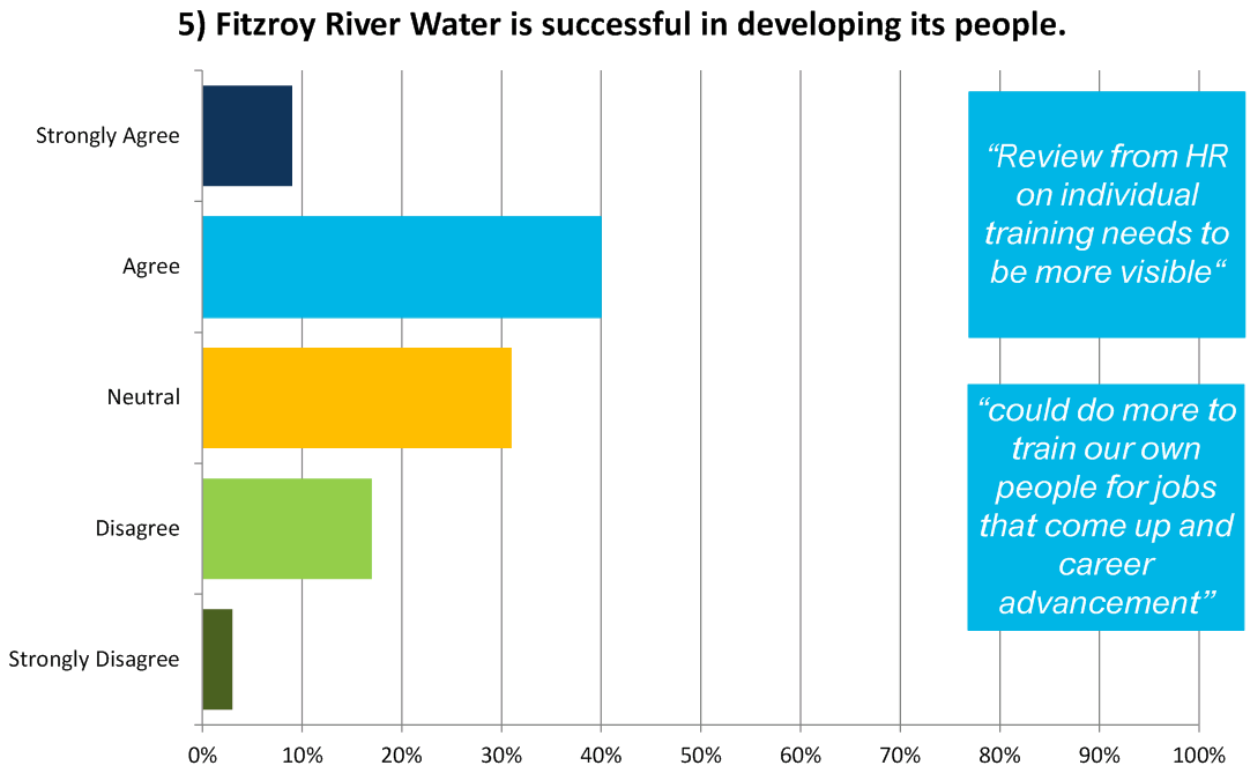
"Obvious lack of maintenance of the waste water treatment plants and associated equipment"

"Asset management could be improved by having a more proactive rather than reactive approach to asset maintenance and management"

Staff Survey Results



Staff Survey Results



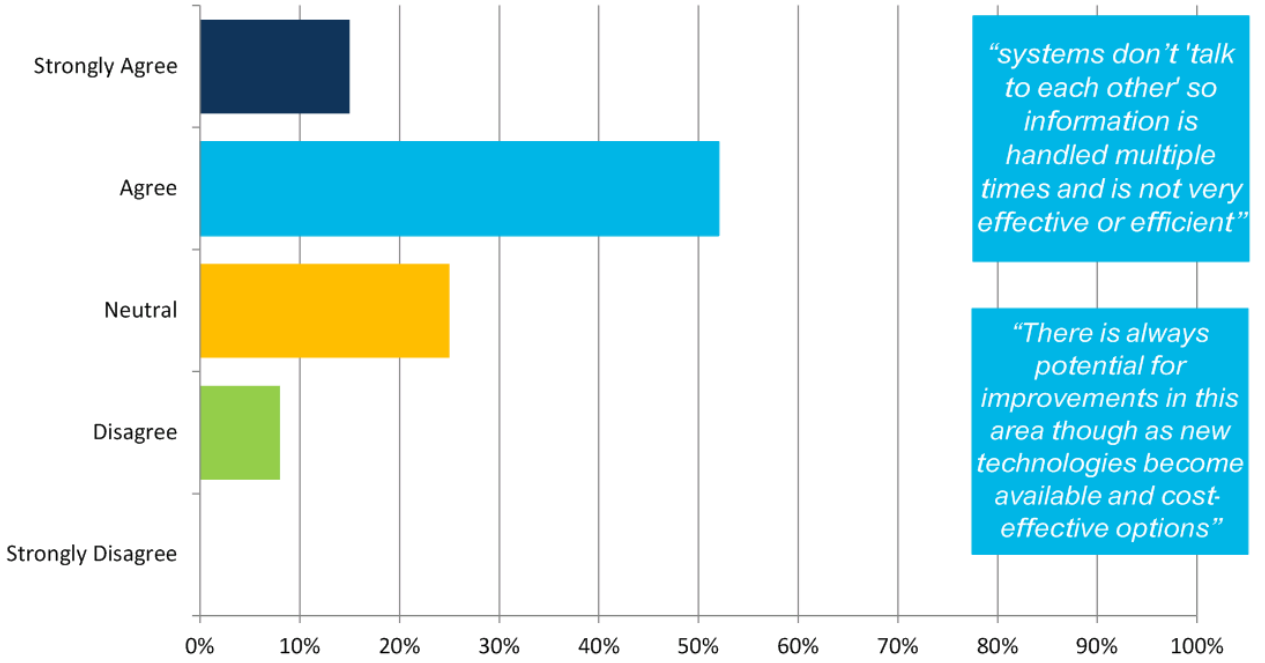
AECOM

Staff Survey Results

AECOM

Staff Survey Results

7) Fitzroy River Water effectively utilises currently technologies to manage its assets and provide good service to customers.



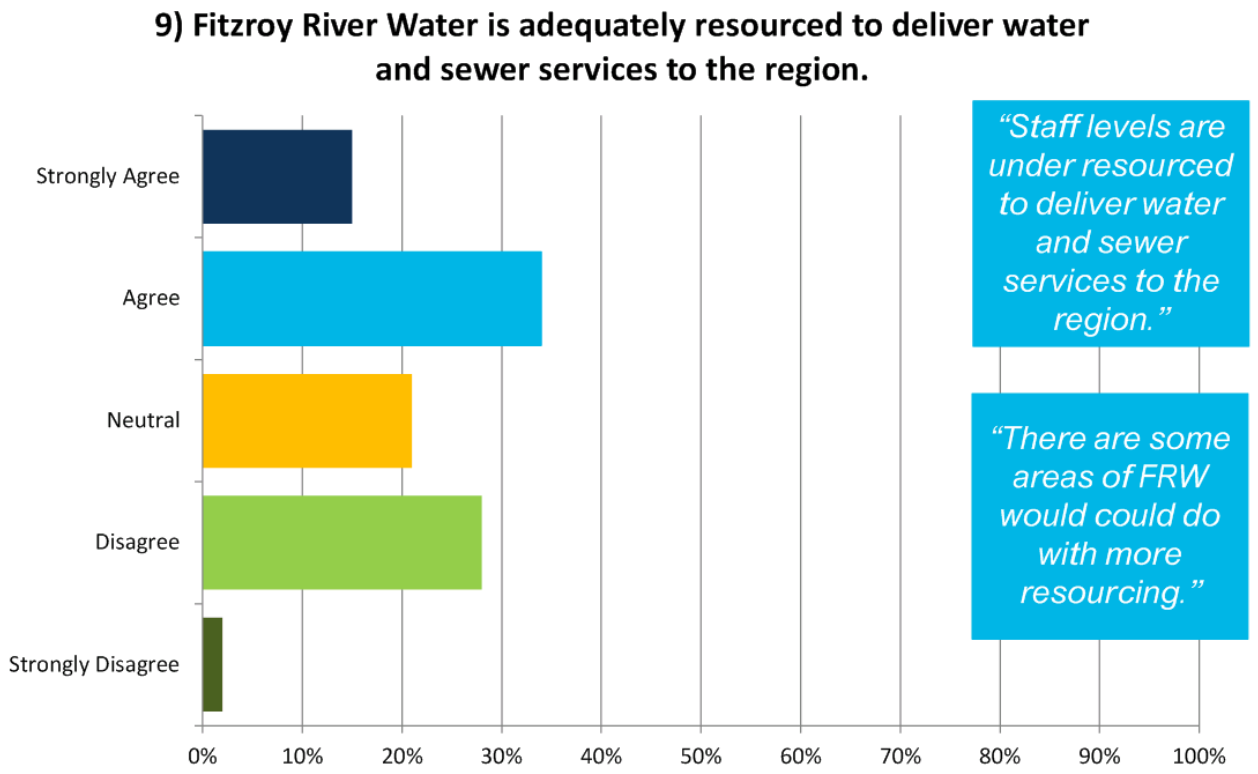
"systems don't 'talk to each other' so information is handled multiple times and is not very effective or efficient"

"There is always potential for improvements in this area though as new technologies become available and cost-effective options"

AECOM

Staff Survey Results

Staff Survey Results



Staff Survey Results

"The current structure would appear to be very stretched with minimal redundancy in a number of key positions."

"Greater efficiencies in time and resources could be had by bringing some of the network systems and design staff back within FRW's direct structure"

"Significant contributions are made by non-FRW staff to FRW's overall performance and there is potential for these interactions to be improved."

"The present management structure does not separate water and sewerage" production" from the repair and maintenance of the assets."

On technology... *"Systems in place are generally well designed and extensively utilised, but emerging technologies are rarely embraced with the emphasis on the ongoing utilisation of dated systems."*

"Where are the future needs discussed and addressed how?"

Appendix C

Asset Management Advisory Committee - Terms of Reference

Appendix C Asset Management Advisory Committee - Terms of Reference

Title:	Asset Management Advisory Committee
Delegated Authority:	Nil
Purpose:	The purpose of this Advisory Committee is to provide Council with advice and guidance on the on-going evolution of their Asset Management frameworks.
Accountability:	The Asset Management Advisory Committee will be accountable to Rockhampton Regional Council (and will act in accordance with any formal resolution of Council).
Key Roles & Responsibilities	Providing Council with overall support and expert advice and guidance on the on-going evolution of their Asset Management frameworks. This will be for all asset types and be across the whole asset life cycle including: Asset Planning; Asset Acquisition; Asset Operations and Maintenance; Asset Renewal and Replacement; Business support systems. Advice in respect of risk management and asset service levels; Reporting in respect of asset performance and processes.
Membership	Mayor (ex-officio) Portfolio Councillor 3 to 4 External Representatives. It is important that the external members are independent of Council and ideally should not be undertaking any substantive consulting work for the Council. Supporting the Committee will be the Chief Executive Officer and relevant Council staff.
External Members Qualifications	Council will be looking for the following expertise of external board members: Strong knowledge and working experience in asset management and associated frameworks (e.g. IIMM or ISO55000); Strong capabilities in strategic planning and direction setting; Demonstrated understanding of the importance of integrating social, environmental and commercial demands; Corporate Governance skills and experience; Experience in Local Government or infrastructure related businesses; Relevant qualifications such as engineering or economics would also be highly regarded.
Quorum	A simple majority of members
Meetings	Meetings will be held on a quarterly basis
Reporting	Minutes of the Meetings will be tabled at Executive Meetings and Council Meetings

Appendix D

Asset Management Observations & Recommendations

Appendix D Asset Management Observations & Recommendations

The following table provides an assessment of FRW's current Asset Management Systems against the International Infrastructure Maintenance Manual (IIMM) Guidelines.

Table 23 Asset Management Maturity Table (As per IIMM Guidelines)

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
2.1 AM Policy Development	Corporate awareness of the benefits of AM	Corporate expectation expressed in relation to the development of AM Plans and AM objectives	AM Policy and AM Objectives developed, aligned to corporate goals and strategic context	AM System scope is defined and documented. Strategic context (internal, external, customer environment) analysed and implications for the AM System documented in the Strategic AM Plan	AM Policy and Strategic AM Plan fully integrated into the organisation's business processes and subject to defined audit, review and updating procedures.	FRW under the Rockhampton Regional Council Asset Management Policy and Strategy. The policy sets out the Council's policy objective including policy statements. Although the Council has an Asset Management Strategy, it does not meet the requirements of ISO 550001 or IIMM	Core - Intermediate	Core	Advanced	Review the Asset Management policy to make it succinct. Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain: - Asset Management objectives; - the scope of the Asset Management System; - the relationship between organisational objectives and asset management objectives; and - define the framework required to achieve the asset management objectives.
2.2 Levels of Service and Performance Management	Level of service requirements generally understood but not documented or quantified	Asset contribution to the organisation's objectives and some basic levels of service have been defined. Customer Groups defined and requirements informally understood	Levels of service and performance measures in place covering the range of service attributes. Annual reporting against performance targets Customer Group needs analysed Level of service and cost relationship understood	Customers are consulted in significant service levels and options	Customer communication plan in place. Levels of service are integral to decision making and business planning	FRW maintains two AM Plans; Water AM Plan and Sewerage AMP. Each of these plans have a level of service section where the various levels of service, performance measures, targets and past performance are provided	Intermediate	Core	Advanced	Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period.
2.3 Demand Forecasting	Future demand requirements generally understood but not documented or quantified. Demand forecasts based on mathematical analysis of past trends and primary demand factors	Demand forecasts based on experienced staff predictions, with consideration of known past demand trends and likely future growth patterns	Demand forecasts based on robust projection of primary demand factor (e,g, population growth) and extrapolation of historic trends. Risk associated with demand change broadly understood and documented. Demand management considered as an alternative to major project development	A range of demand scenarios is developed (e.g. high/medium/low). Demand management is considered in all strategy and project decisions	Risk assessments of different demand scenarios with mitigation actions identified	The Water and Sewerage AMPs contain a demand section. The section identifies future development areas. No information is provided on actual activity forecast demand.	Intermediate	Core	Advanced	Revise Asset Management Plans to provide: - water and sewer demand forecasts including difference demand scenarios; - risk assessments and identification of demand gaps for each scenario; and - risk mitigation measures / asset and non-asset solutions for addressing demand gaps.

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
2.4 Asset Register Data	Asset information in combination of sources and formats. Awareness of need for an asset register	Basic physical information recorded in a spreadsheet or similar (e.g. location, size, type), but may be based on broad assumptions or not complete	Sufficient information to complete asset valuation (basis attributes, replacement cost and asset age/life) and support prioritisation of programmes (criticality). Asset hierarchy identified, identification and attribute systems documented. Metadata held as appropriate	A reliable register of physical, financial and risk attributes recorded in an information system with data analysis and reporting functionality. Systematic and documented data collection process in place.	Information on work history type and cost, condition, performance etc. recorded at asset component level. Systematic and fully optimised data collection programme with supporting metadata.	Sections 7.1 of both the Water and Sewerage AMPs provide information on the asset management system and a description of the asset register including asset hierarchy	Core	Core	Advanced	Develop and implement asset data collection program for inclusion in the Asset Management Plan.
2.5 Asset Condition	Condition and performance understood but not quantified or documented	Adequate data and information to confirm current performance against AM objectives	Condition and performance information is suitable to be used to plan maintenance and renewals to meet over the short term	Future condition and performance information is modelled to assess whether AM objectives can be met in the long term. Contextual information, such as demand, is used to estimate likely performance	The type, quality and amount of data are optimised to the decisions being made,. The underlying data collection programme is adapted to reflect the assets' lifecycle stage	The Water AMP provides sufficient information on the various asset performance. No information on water asset condition is provided although there is information on water pipes breakage. The Sewerage AMP provides information on the performance and condition of pipes. No information is provided on the condition and performance of the other wastewater assets. Available asset condition information is available in Conquest asset database system.	Core	Aware-Basic	Advanced	Develop and implement a condition assessment strategy for all water and wastewater assets.
3.1 Decision Making	AM decisions based largely on staff judgement	Corporate priorities incorporated into decision making	Formal decision making techniques (MCA/BCA) are applied to major projects and programmes, where criteria are based in organisation's AM objectives	Formal decision making and prioritisation techniques are applied to all operational and capital asset programmes within each budget category. Critical assumptions and estimates are tested for sensitivity to results	AM objectives/targets are set out based on formal decision making techniques, supported by the estimated costs and benefits of achieving targets. The framework enables projects and programmes to be optimised across all activity areas. Formal risk-based sensitivity analysis is carried out.	The Sewerage AMP (PG 37) notes "in developing a renewal strategy for the water and sewerage assets, consideration has been given to risk, levels of service because of asset performance/condition, valuation information on remaining lives and FRW's adopted levels of service". It is not clear that these factors are incorporated into the renewal strategy. Inconsistent approach to decision making / prioritisation across assets resulting in current level ranging from Basic to Intermediate / Advanced (i.e. risk assessments completed in DWQMP and RMIP. Robust planning surrounding STP strategies).	Basic (evidence of Intermediate to Advanced in some areas)	Basic	Core	Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects (**Refer Recommended Action No. 26**).

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
3.2 Risk Management	Risk management is identified as a future improvement. Risk framework developed	Critical services and assets are understood and considered by staff involved in maintenance/renewal decisions	Critical assets and high risks identified. Documented risk management strategies for critical assets and high risks	Resilience level assessed and improvements identified. Systematic risk analysis to assist key decision-making. Risk managed and prioritised consistently across the organisation	Resilience strategy and programme in place including defined levels of service for resilience. Formal risk management policy in place. Risk is quantified and risk mitigation options evaluated. Risk is integrated into all aspects of decision making.	Section 5.1.5 of the Sewerage AMP talks about risk management. However, other than a mention of the types of risk, no formal risk assessment is provided. Table 5.21 of the Sewerage AMP talks about sewer pump station criticality. However, it is not clear from the table what the criticalities of these pumps is. Section 5.1.5 of the Water AMP talks about risk management and broadly identifies the various water asset risks and their broad mitigation measures. No formal risk assessment is provided. Inconsistent approach to risk across assets resulting in current level ranging from Basic to Intermediate / Advanced (i.e. risk assessments completed in DWQMP and RMIP. Robust planning surrounding STP strategies).	Basic-Core (evidence of Intermediate to Advanced in some areas)	Core	Intermediate	Develop and apply methodology for assessing all water and wastewater assets criticalities. Undertake formal asset risk assessment. Amend Asset Management Plans to include a section on risk assessment. Section to include a summary of the formal asset risk assessment process and findings.
3.3 Operational Planning	Operational processes based on historical practices	Operational procedures are available for critical operational processes. Operations organisational structure in place and roles assigned	Operating procedures are available for all operational processes. Operational support requirements are in place	Risk and opportunity planning completed. Operational objectives and intervention levels defined and implemented. Alignment with organisational objectives can be demonstrated	Continual improvement can be demonstrated for all operational processes. Comparison with ISO 55001 requirements complete.	Table 7.2 of the Water AMP detail various operational policies, strategies and procedures. Table 7.3 of the Sewerage AMP provide the same information for sewer assets	Core	Basic-Core	Intermediate - Advanced	Undertake formal asset risk assessment. Develop improvement plan and assessment criteria for all operational processes.
3.4 Capital Works Planning	Capital investment projects identified during annual budget process	There is a schedule of proposed capital projects and associated costs for the next 3-5 years based on staff judgement of future requirements	Projects have been collated from a wide range of sources and collated into a project register. Capital projects for the next three years are fully scoped and estimated. A prioritisation framework is in place to rank the importance of capital projects	Formal options analysis and business case development has been completed for major projects in the 3-5 year period. Major capital projects for the next 10-20 are conceptually identified and broad cost estimates are available	Long-term capital investment programmes are developed using advanced decision techniques such as predictive renewal modelling	Section 5.1.6 of the Sewerage AMP talks about the capital works plan. The section notes "The whole process of identifying renewal projects in this plan has involved Asset Management Staff reviewing the condition of the expired assets through analysing the components maintenance and inspection history, to identify particular failure modes that will indicate it the component is at the end of its useful life. Next, the criticality is reviewed in order to prioritise the replacements. Finally, the list is provided to Operations	Basic-Core	Basic	Intermediate	Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects (**Refer Recommended Action No. 25**). Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels (**Refer Recommended Action No. 26**).

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
						staff to add projects where the performance of the asset is not meeting levels of service and the asset requires replacement earlier than its adopted useful life. The plan also notes on pg. 49-New Capital Works Program "10-year plans below have come from Asset Management, Operations and Planning staff". The plan includes a ten year program of works (Table 5.23) for sewerage reticulation assets. Section 5.1.6 of the Water AMP talks about the capital works plan. The section notes "The 10-year plans below have come from Asset Management, Operations and planning staff". Table 5.18 provides a 110 year list of water reticulation capital works alongside associated budgets . No information on required capital works for other asset classes is provided. Aware of some intermediate requirements achieved for some projects.				
3.5Financial and Funding Strategies	Financial planning is largely an annual budget process, but there is intention to develop long term forecasts	Assets re-valued in compliance with financial reporting and accounting standards.10 year financial forecast are based in extrapolation of past trends and broad assumptions about the future. Expenditure categories compliant with FRS.	Asset revaluations have a "B" grade data confidence.10 year + financial forecasts based on current comprehensive AMPs with detailed supporting assumptions/reliability factors	Asset revaluations have a 'B' grade data confidence.10 year + financial forecasts based on current comprehensive AMPs with detailed supporting assumptions/reliability factors	Asset revaluations have an 'A' grade data confidence.10 year + financial forecasts based on comprehensive, advanced AM plans with detailed underlying assumptions and high confidence in accuracy.Advanced financial modelling provides sensitivity analysis, demonstrate whole of life costing and cost analysis for level of service options.	The water and sewerage AMPs contain information on valuations for water and sewerage assets and 10 year financial forecasts. No information has been provided as to the reliability of both the valuations and financial forecasts	Basic	Basic	Core	Amend Asset Management Plans to include data confidence levels and assumptions made for the valuations and financial forecasts.

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
4.1 AM Teams	Leadership is supportive of AM	AM functions are carried out by small groups. Roles reflect AM requirements	Position descriptions incorporate AM roles. AM coordination processes established. Ownership and support of AM by leadership. Awareness of AM across most of the organisation	Organisational structures support AM. Roles reflect AM resourcing requirements and reflected in position descriptions for key roles. Consistent approach to AM across the organisation. Internal communication plan established	Roles reflect AM requirements and defined in all relevant position descriptions. Formal documented assessment of AM capability and capacity requirements to achieve AM objectives. Demonstrable alignment between AM objectives, AM systems and individual responsibilities	The FRW organisational structure for Coordinator Strategic Infrastructure. It is assumed that this position coordinates all asset management functions undertaken by the organisation from planning to asset disposal.	Core	Core	Advanced	Complete a formal review of current Asset Management resourcing, roles (position descriptions) and gaps in requirements. Develop in consultation with the General Manager of Regional Services, a plan for addressing these gaps.
4.2 AM Plans	Stated intention to develop AM Plans	AM contains basis information on assets, service levels, planned works and financial forecasts (5-10 years) and future improvements	AM objectives are defined with consideration of strategic context. Approach to risk and critical assets described, top-down condition and performance assessment, future demand forecasts, description of supporting AM processes, 10 year financial forecasts, 3 year AM improvement plan	Analysis of asset condition and performance trends (past/future), customer engagement in setting LoS, ODM/risk techniques applied to major programmes. Strategic context analysed with risks, issues and responses described	Evidence of programmes driven by comprehensive ODM techniques, risk management programmes and level of service/cost trade-off analysis. Improvement programmes largely complete with focus on ongoing maintenance of current practice	Both the Water and Sewerage AMPs define AM objectives which have considered the strategic context. They both provide information on assets, service levels, planned works, financial forecasts and future improvements The risk assessment in both AMPs is very rudimentary with no clear identification of critical assets. Both plans include adequate information on asset performance. The Sewerage AMP contains information on the condition of sewer pipes but no information on the condition other sewerage infrastructure (i.e. pumpstations) Future demand forecasts in both plans only show population forecasts and future development areas. No information on expected water and wastewater future demand is provided. Table 4.3 of the Water AMP provides a list of projects and budgets for projects to meet demand. It is not clear what demand will be met by these projects since no information on infrastructure gaps in meeting demand is provided. Both AMPs include information on supporting AM processes including accounting and financial and asset management system description.	Basic	Basic-Core	Intermediate	In the next revisions of AMPs: Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period. Revise Asset Management Plans to provide: - water and sewer demand forecasts including difference demand scenarios; - risk assessments and identification of demand gaps for each scenario; and - risk mitigation measures / asset and non-asset solutions for addressing demand gaps. Amend Asset Management Plans to include a section on risk assessment. Section to include a summary of the formal asset risk assessment process and findings. Amend Asset Management Plans as per the following: - Within the Lifecycle Management Plans section , separate asset information into its own section (to follow Levels of Service); - Asset description section to include information on asset attributes, condition, performance, criticality and valuations; - In relation to lifecycle strategies, provide information on current and future routine and non routine

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
						Both AMPs provide 10 year financial forecast information				- maintenance; and - include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.
4.3 Management Systems	Awareness of need to formalise systems and processes	Simple process documentation in place for service-critical AM activities	Basic Quality Management System in place that covers all organisational activities. Critical AM processes are documented, monitored and subject to review. AM System meets the requirements of ISO 55000	Process documentation implemented in accordance with the AM System to appropriate level of detail. Internal management systems are aligned.	ISO certification to multiple standards for large intensive organisations, including ISO 55001. Strong integration of all management systems within the organisation		Basic	Basic	Core	Develop a Quality Management System for asset management and project delivery. Including the following as discussed in the Capital Planning and Delivery section: - Review of Technical Specifications; - Quality control framework for works constructed internally; - Framework for project management / delivery framework; and - standardised templates, forms and processes for Contract Administration / Management Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain: - Asset Management objectives; the scope of the Asset Management System; - the relationship between organisational objectives and asset management objectives; and - define the framework required to achieve the asset management objectives.
4.4 Information Systems	Intention to develop an electronic asset register	Asset register can record core asset attributes-size, material etc. Asset information reports can be manually generated for AM Plan input	Asset register enables hierarchical reporting (at component facility level). Customer request tracking and planned maintenance functionality enabled. System enables manual reports to be generated for valuation, renewal forecasting	Spatial relationship capability. More automated analysis reporting on a wider range of information	Financial, asset and customer service systems are integrated and all advanced AM functions are enabled. Asset optimisation analysis can be completed	Sections 7.1 of both the Water and Sewerage AMPs provide information on the asset management system and a description of the asset register including asset hierarchy. 'Conquest is the corporate wide asset management system	Core	Intermediate	Intermediate	Investigate potential for integration of GIS into Asset Management System.

Section	Asset Management Maturity Level (As per IIMM Guidelines)					FRW State / Comments	FRW Current Maturity	Maturity of Other Similar sized organisations	5 Year Maturity Goal	Recommended Activities to Achieve Maturity Goal
	Aware	Basic	Core	Intermediate	Advanced					
4.5 Service Delivery Mechanisms	AM roles generally understood	Service delivery roles clearly allocated (internal and external), generally following historic approaches	Core functions defined. Procurement strategy/policy in place with the primary internal service providers and contract for the primary external service providers	Risks, benefits and cots of various outsourcing options considered and determined. Competitive tendering practices applied with integrity and accountability	All potential service delivery mechanisms reviewed and formal analysis carried out to identify best delivery mechanisms		Core	Core	Intermediate	Refer Capital Planning and Delivery section.
4.6 Improvement Planning	Recognition of AM improvements	Improvement actions identified and allocated to appropriate staff	Current and future AM performance assessed and gaps used to drive the improvement actions. Improvement plans identify objectives, timeframes, deliverables, resource requirements and responsibilities	Formal monitoring and reporting on the improvement programme to Executive Team. Project briefs developed for all key improvement actions	Improvement plans specify key performance indicators (KPIs) for monitoring AM improvement and these are routinely reported	Tables 8.1 of the of both the Water and Sewerage AMPs outline asset management improvement actions. No information on both AMPs is provided on staff responsibilities timeframes, deliverables or resource requirements	Aware	Core	Advanced	Amend the Asset Management Plans to include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.

FITZROY RIVER WATER OPERATIONAL REVIEW

State Benchmarking Report 2015-16

Meeting Date: 18 July 2017

Attachment No: 2

Queensland's Urban Potable Water and Sewerage Benchmarking Report 2015/16 (Version 2 – 23/02/2017)[1]

This is the sixth annual Urban Potable Water and Sewerage Benchmarking Report to be produced by ***qldwater*** for Queensland. It contains a suite of indicators and benchmarking data for 71 of Queensland's urban water/sewerage utilities. The data is presented in figures which provide comparative information to enable each Service Provider to benchmark its performance against that of similar sized Service Providers.

The report is divided into two areas (i.e. Sewerage Services and Potable Water Supply) and looks at aspects of capacity and viability, customer service, condition of assets, management and performance.

Queensland (along with NSW) differs from other States and Territories in Australia in that its drinking water and wastewater services are primarily the responsibility of local government. In Queensland, urban services are provided by around 70 councils and two council-owned Distribution Retail Entities (DREs) compared to other States and Territories that typically have either a single authority or a number of regional statutory authorities.

Queensland's council-owned Service Providers spend around $2 billion each year operating the $37B worth of water and sewerage infrastructure under their control. This infrastructure includes approximately:

- 381 water treatment plants which can produce 1,576 ML of drinking water per day
- 285 sewage treatment plants
- 41,900 km of water mains
- 33,750 km of sewerage mains and channels
- 552 bores, 76 dams and 84 weirs
- 3,689 sewage pumping stations
- 905 water pumping stations

These water and wastewater services are provided to more than 1.88 million water connections and 1.62 million sewerage connections in Queensland. They are required for public health and essential services – and generally must operate continuously without disruption.

Legislative changes in 2014 resulted in a change to the reporting requirements of Service Providers in Queensland. 2014/15 was the first time that Service Providers in the State reported via the *Key Performance Indicators Framework*. This change underscored the importance of achieving good outcomes in compliance and delivering services to communities through rigorous benchmarking. This has brought Queensland in line with several other Australian jurisdictions, and with the National Performance Framework whereby larger Service Providers have been required to report annual data for some time.

This 2015/16 report uses the same indicators as the 2014/15 report but differs slightly from earlier reports as some indicators are no longer reported by all Service Providers due to these legislative changes in reporting requirements. Some indicators are now only reported by Service Providers with greater than

[1] Figure 7 has been corrected from the original report released.

10,000 water connections, while others are not separated into water and sewerage components or not reported at all.

Indicators no longer reported after 2013/14:

- % of sewage volume treated that was compliant
- % of total population where microbiological compliance was achieved
- Number of sewerage service complaints (per 1,000 properties)
- Number of water service complaints (per 1,000 properties)

Indicators only reported by Service Providers with greater than 10,000 connections since 2013/14:

- Economic real rate of return – water
- Economic real rate of return – sewerage
- Typical Residential Bill – water
- Typical Residential Bill – sewerage
- Real water losses
- Sewage overflows reported to the environmental regulator

New indicators that commenced in 2014/15:

- (Average) Response/reaction time for incidents (water)
- Number of water and sewerage complaints per 1,000 properties (in previous *Benchmarking Reports* the "number of sewerage service complaints per 1,000 properties" and "number of water service complaints per 1,000 properties" were reported)
- Typical annual residential water and sewerage bill (in previous *Benchmarking Reports* the "Typical annual residential bill" was reported by all Service Providers as separate components (sewerage and water).

qldwater strongly supports the use of performance reporting and benchmarking to assist Service Providers in the continuous improvement of the services they provide to their community. Performance reporting and benchmarking provides valuable comparative data. This data enables each Service Provider to critically examine its performance by investigating trends in its indicators and by benchmarking these against those of similar Service Providers, and particularly against high-performing Service Providers that are in a similar position and implementing the best-practices that are appropriate for their region. The diversity of the Queensland sector means that there is a broad variety of external factor influencing efficiency and effectiveness of service providers so comparisons with those with similar cost drivers will be most useful.

External factors potentially influencing performance

There are a wide range of 'external' factors which can influence a Service Provider's performance. These factors include things such as:

- climate (e.g. rainfall patterns, evaporation, temperature)
- geography (e.g. geology (i.e. soil reactivity (shrink-swell)), typology (i.e. mountains, flood plain))
- size (e.g. population, number of connections, km^2)
- location (e.g. SEQ vs. Western Qld, dense urban vs. rural urban)
- services provided (e.g. water treatment vs. treated water imported from other supplier)
- water supply (e.g. river vs. dam vs. bore water may require different treatment, distance to supply)

- asset age (e.g. old assets may require more maintenance/repairs and be less efficient)
- regulatory requirements (e.g. sewerage treatment levels)

It is important to take into account these factors when comparing performance with other Service Providers.

One way for Service Providers to limit the effects of these external factors is to examine trends in their own performance indicators over time. It must be remembered though, that there may be changes in the external factors over time as well (e.g. wet vs. dry years).

Service Provider size as a factor in assessing Statewide 'benchmark' performance

It is important to note up front that the figures for smaller Service Providers may be skewed towards relatively higher values for indicators that standardise data by 'per property', 'per connection' or 'per 100 km of mains'. This is due to these smaller Service Providers having very low populations and relatively short main lengths which means that even small figures can be magnified when compared with larger organisations. This means that these indicators can result in small organisations comparing poorly with larger ones and in such cases benchmarking is only useful against Service Providers of a similar size.

Sewerage Services

Capacity and viability

The total reported capital expenditure on sewerage infrastructure in Queensland was $424,994,061 for 2015/16. The Statewide median capital expenditure was $169 per property. In addition, the total reported operating costs to collect and treat sewerage from across the State was $592,836,775 at a median cost of $342 per property for the State.

Capital expenditure

Capital expenditure will vary markedly from year-to-year, particularly for Service Providers with a small number of sewerage assets, but the indicator provides a snapshot of investment across the industry.

Operating costs

The 'operating cost (sewerage) per property' can be a good indication of the performance of a Service Provider. The components of operating cost (operation, maintenance and administration) are:

- Charges for bulk treatment/transfer of sewerage
- Salaries and wages
- Overheads on salaries and wages
- Materials/chemicals/energy
- Contracts
- Accommodation
- All other operating costs that would normally be reported
- Items expensed from work in progress (capitalised expense items) and pensioner remission expenses
- Competitive neutrality adjustments, they may include but not be limited to, land tax, debits tax, stamp duties and council rates

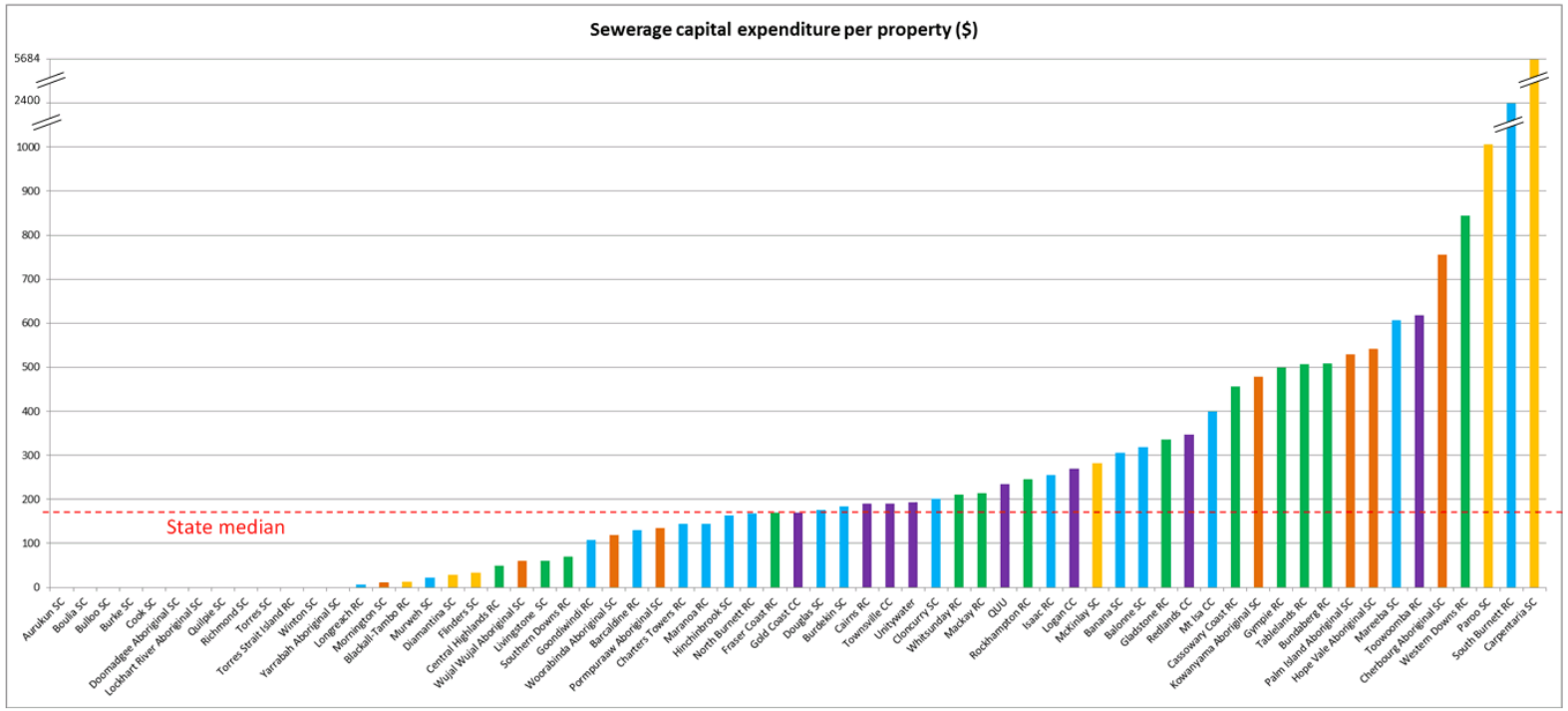


Figure 1. Sewerage capital expenditure per property ($)[2].

Note: This figure shows ranked values of sewerage capital expenditure per property ($) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[3]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for sewerage capital expenditure is $169 per property. Each bar represents one SP.

[2] Note: figures for smaller SPs may be skewed towards higher values due to their very low populations.
[3] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

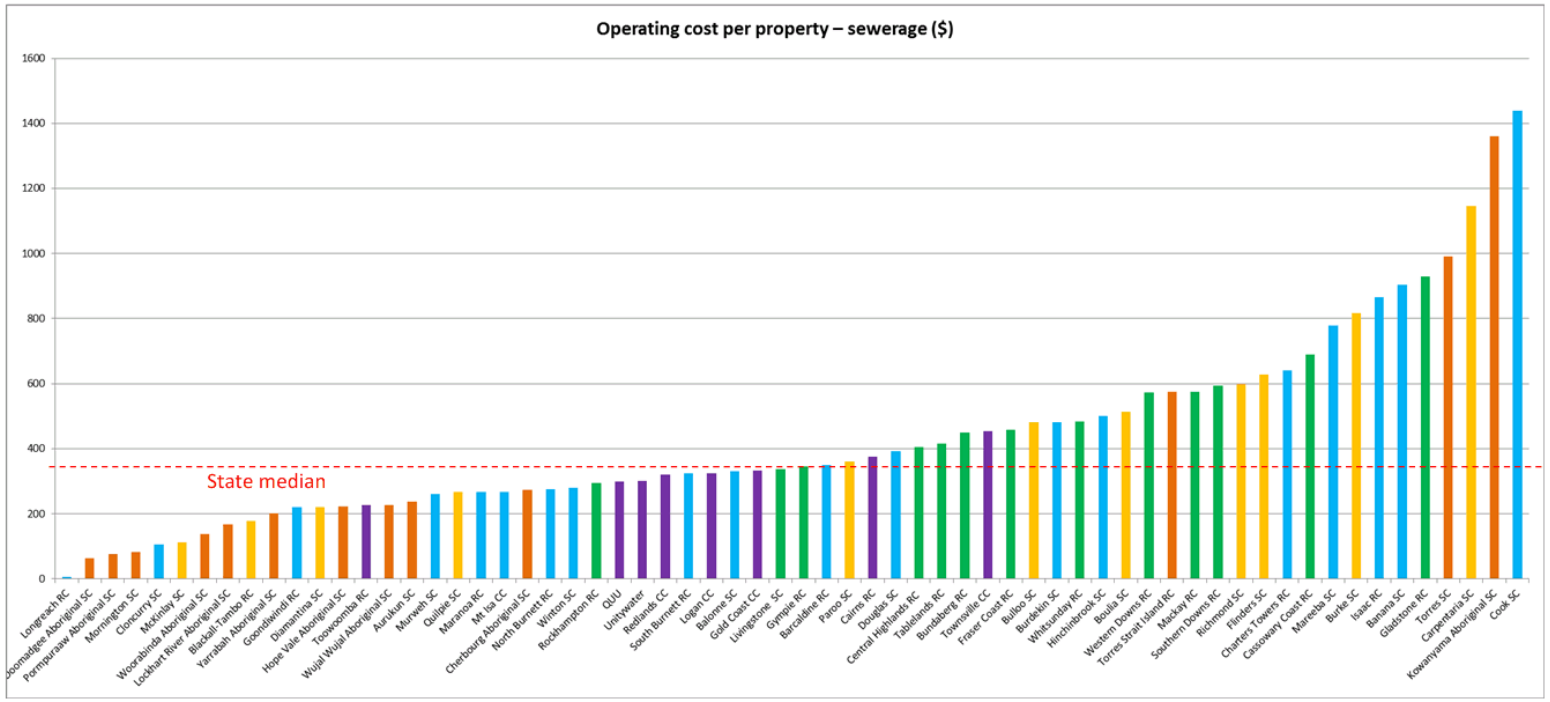


Figure 2. Operating costs per property – sewerage ($)[4].

Note: This figure shows ranked values of operating costs per property – sewerage ($) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[5]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for operating costs – sewerage is $342 per property. Each bar represents one SP.

[4] Note: figures for smaller SPs may be skewed towards higher values due to their very low populations.
[5] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

Topography will also affect operating costs through the amount of pumping needed to move the sewage to the treatment plant. With higher levels of sewage pumping come an associated increase in asset maintenance and energy costs.

Cost drivers for sewerage services

The type of treatment as well as the level of treatment (related to the discharge requirements) of sewage will affect the operating costs. With higher levels of sewerage treatment come associated increases in other costs, particularly energy.

Service Providers with a number of separate sewage systems, larger areas of low density service (i.e. low numbers of properties serviced per km of main) and those with higher numbers of, and smaller, sewerage treatment plants will generally need more employees to effectively manage their systems and thus have higher operational costs. Management of biosolids is another costly expense which is greater for large service providers, particularly if they are at a large distance from reuse or disposal sites.

The maintenance costs of sewerage infrastructure are related to several factors, such as the age and condition of the assets, the soil reactivity (shrink-swell rating) and the density of connected properties.

Typical annual residential bill

The 'typical annual residential bill – sewerage' is the dollar amount of the typical residential sewerage bill for the financial year, including special levies. If the bill is cost-reflective and a Service Providers' operations are run effectively and efficiently, the typical residential bill should be minimised and indicate the Service Provider is providing value for the community. However, if bills are lower than costs then a Service Provider may not be financially sustainable. The aim for a Service Provider should be to provide agreed levels of service at the lowest, but importantly sustainable, residential bill.

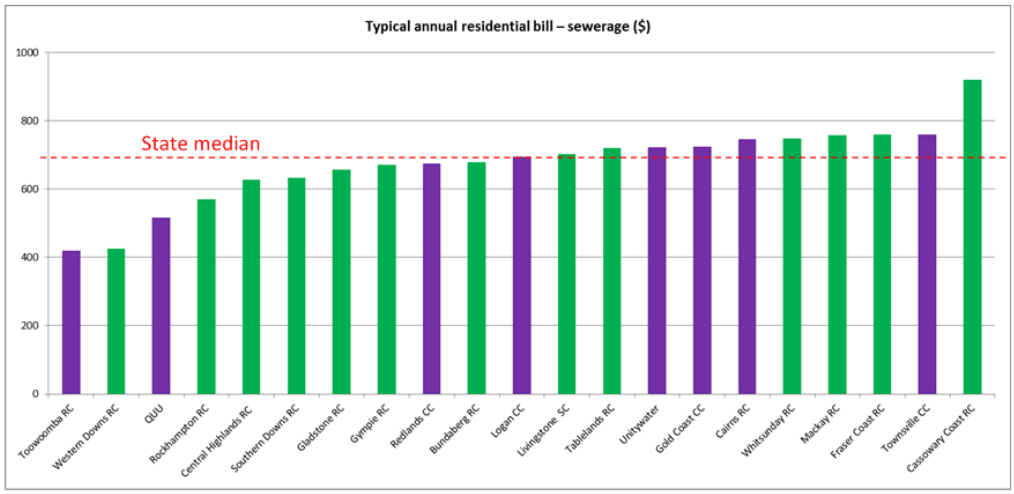


Figure 3. Typical annual residential bill – sewerage ($).

Note: This figure shows ranked values of the typical annual residential bill – sewerage ($) for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the typical residential bill – sewerage of these SPs is $694. Each bar represents one SP.

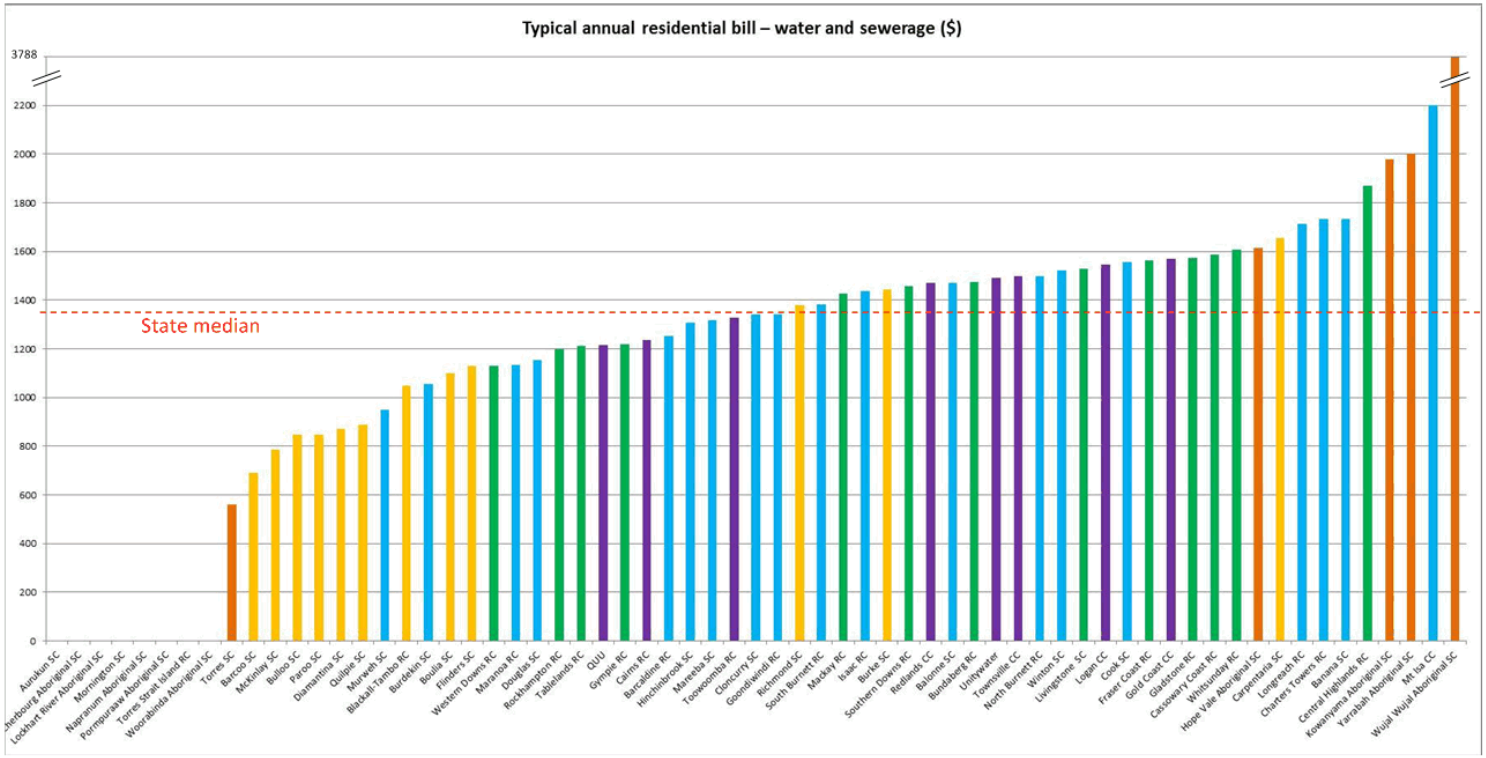


Figure 4. Typical annual residential bill – water and sewerage ($).

Note: This figure shows ranked values of the typical annual residential bill – water and sewerage ($) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[6]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the typical residential bill – water and sewerage is $1340. Each bar represents one SP.

[6] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

Note that this indicator is one of those that is now only required to be reported into separate water and sewerage components by Service Providers with greater than 10,000 connections. The median typical annual residential bill for sewerage services by Service Providers with greater than 10,000 connections was $694. The median value for the typical annual residential bill (for water and sewerage combined) is $1,340 and is reported by all Service Providers (see Fig. 4). The trend for smaller Service Provider's bills to reflect lower costs than large providers is opposite to the trend of decreasing cost with size demonstrated for large utilities nationally. This in part reflects the lower costs for some small service providers that do not have sewage treatment and may have simple or no water treatment because of clear bore water supplies. Note that most aboriginal councils in Queensland do not charge water or sewerage rates.

Economic real rate of return

The financial performance of most Service Providers is intricately linked with that of the owner council. This makes determining the financial performance of the sewerage operations, as an individual business unit, hard to assess for many Service Providers.

In addition, an important distinction must be made between the category of (usually large) councils that are financially sustainable and can provide dividends to benefit their communities, and the small and often more remote councils. In the latter, smaller populations (and thus rate bases) can mean that capital investment in sewerage infrastructure is difficult and relies on funding assistance and subsidies from other council income. In some cases even operating costs can be difficult to recover.

One comparator of financial performance is the Economic Real Rate of Return (ERRR). The ERRR (sewerage) is the revenue from sewerage business operations less operating expenses for the sewerage business divided by written down replacement cost of operational assets. An appropriate value for ERRR is difficult

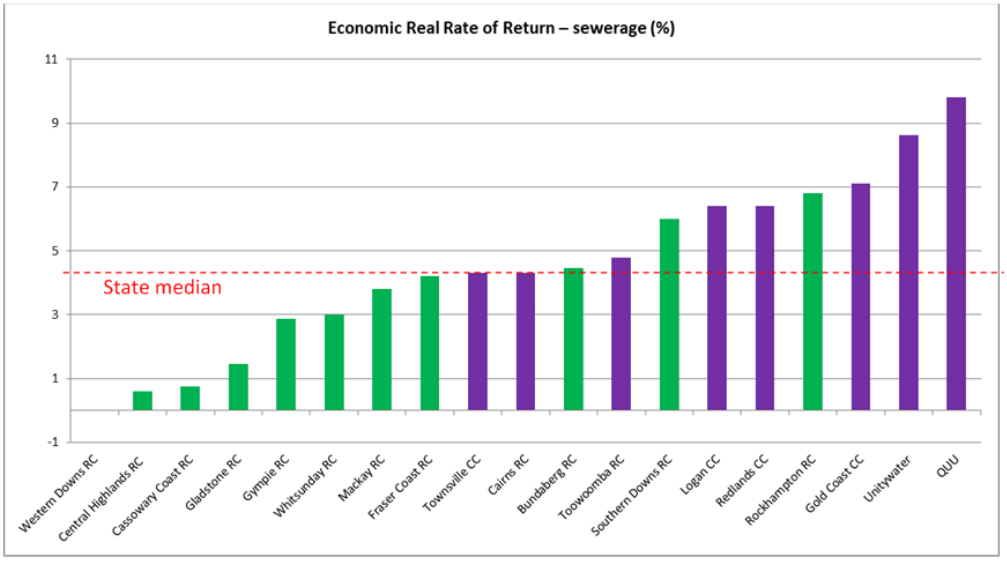


Figure 5. Economic Real Rate of Return (ERRR) – sewerage (%).

Note: This figure shows ranked values of the ERRR – sewerage (%) for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the ERRR – sewerage of these SPs is 4.3%. Each bar represents one SP.

8

to determine for Service Providers but should be at least positive with a margin to allow for return on capital (NWC and WSAA, 2010). OTTER (2011) suggested that an ERRR of around 7% was required for full cost recovery in the Tasmanian urban water industry while the Productivity Commission questioned whether the NWC and NSW Office of Water definition of full cost recovery as an ERRR "greater than or equal to zero" was sufficient (see PC, 2011, p. 386).

ERRR is now only reported for Service Providers with greater than 10,000 water connections. The Statewide median value for ERRR (sewerage) for these Service Providers was 4.3%.

Customer service

Water and sewerage complaints

Water and sewerage complaints are no longer required to be reported separately (or broken down into sub-categories like service, billing, etc.). Water and sewerage complaints (combined) is reported by all Service Providers and shown below (Fig. 6). Unfortunately, the definition of what comprises a 'complaint' varies markedly among utilities and comparisons among Service Providers are therefore largely inappropriate. During 2015/16 a total of 18,717 water and sewerage related complaints were reported across the State. The Statewide median number of water and sewerage complaints per 1,000 properties was 6.7.

Response time to sewerage incidents

The Statewide median for the average response time for sewerage incidents was 43 minutes but there is no 'ideal' response time as it varies depending on, the type of incident (e.g. emergencies should be treated faster than minor issues) and the distance to the area of concern. Response time to incidents is meant to provide an indication of customer service: no customer wants to be left waiting when they have a serious water or sewerage problem. Unfortunately, there is no consistent interpretation of the definition, or more importantly, no guidance in the definition of which 'incidents' to include in the analysis. Therefore, comparisons among Service Providers are largely inappropriate.

Condition of assets

Sewerage main breaks and chokes

The Statewide median for the number of sewer main breaks and chokes reported per 100 km of sewer mains during 2015/16 was 11.4. This indicator can provide a rough indication of the condition and age of sewerage infrastructure although data may include breaks caused by third parties (e.g. excavation).

Performance

Sewage overflows

Sewage overflow data is now only reported for Service Providers with greater than 10,000 water connections. During 2015/16 these Service Providers reported that a total of 174 sewage overflow events were reported to the environmental regulator (EHP) with a Statewide median for Service Providers with greater than 10,000 connections of 0.4 events per 100 km of mains. Overflows at pumping stations may occur in wet weather when sewage flows are increased from illegal connections to the sewer and because of stormwater infiltration. Overflows can also be caused by mechanical or power failures or blockages. Some pumping stations are designed with a capacity to overflow at such times to prevent back-up of sewage and potential overflows in private premises. The ways that sewage overflows are captured and reported varies markedly around the state meaning that comparisons between service providers are often

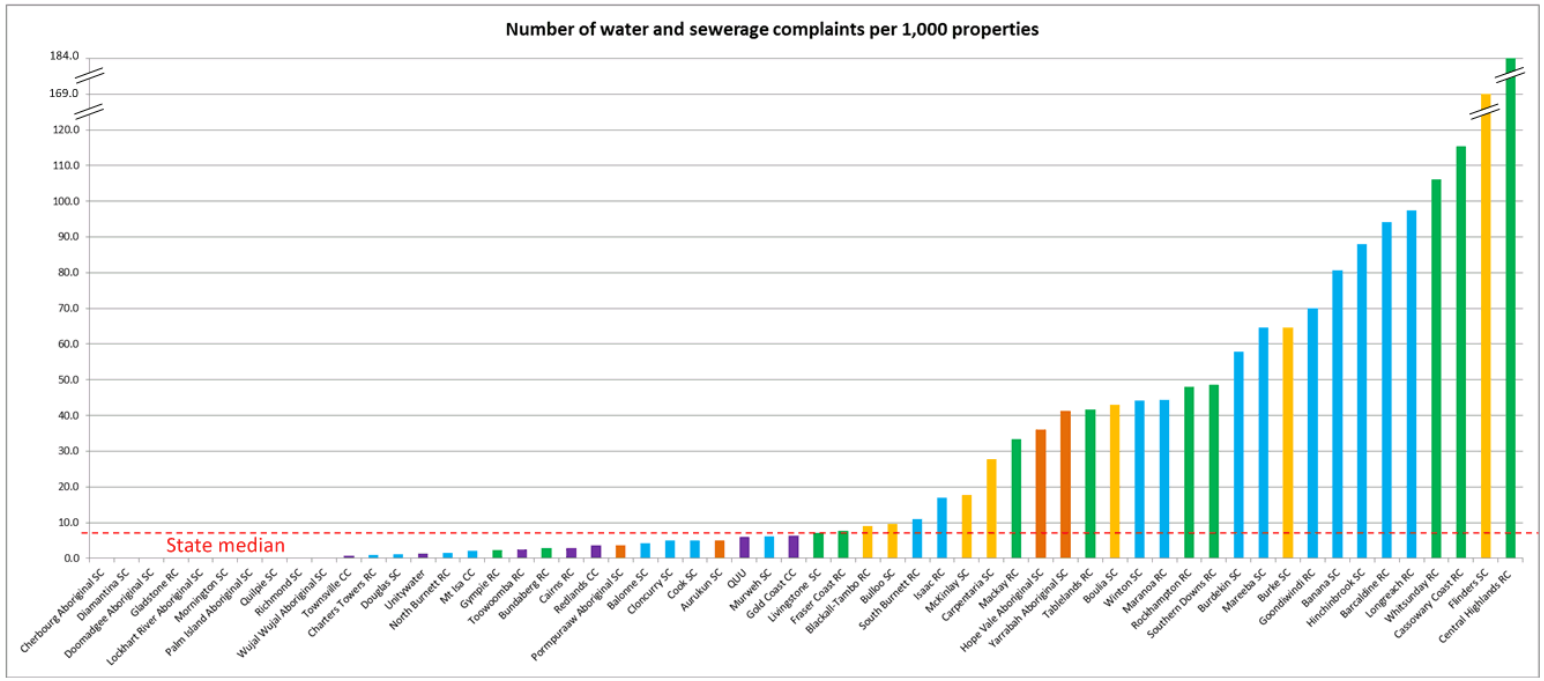


Figure 6. Number of water and sewerage complaints per 1,000 properties[7].

Note: This figure shows ranked values for the number of water and sewerage complaints per 1,000 properties for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[8]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the number of water and sewerage complaints per 1,000 properties is 6.7. Each bar represents one SP.

[7] Note: figures for smaller SPs may be skewed towards higher values due to their very low populations.
[8] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

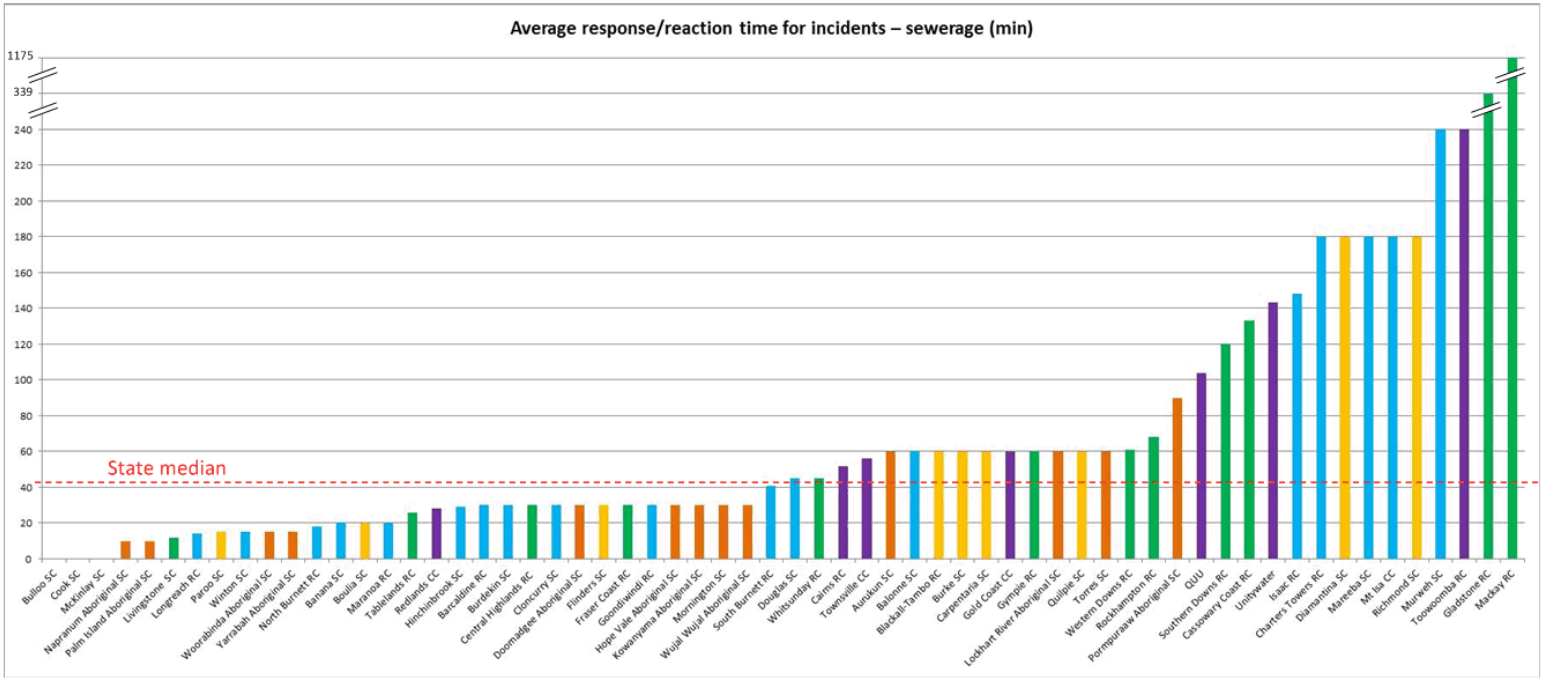


Figure 7. Average response/reaction time for incidents – sewerage (min).

Note: This figure shows ranked values for the average response/reaction time for incidents – sewerage (min) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[9]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the (average) response/reaction time for incidents (sewerage) is 43 minutes. Each bar represents one SP.

[9] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

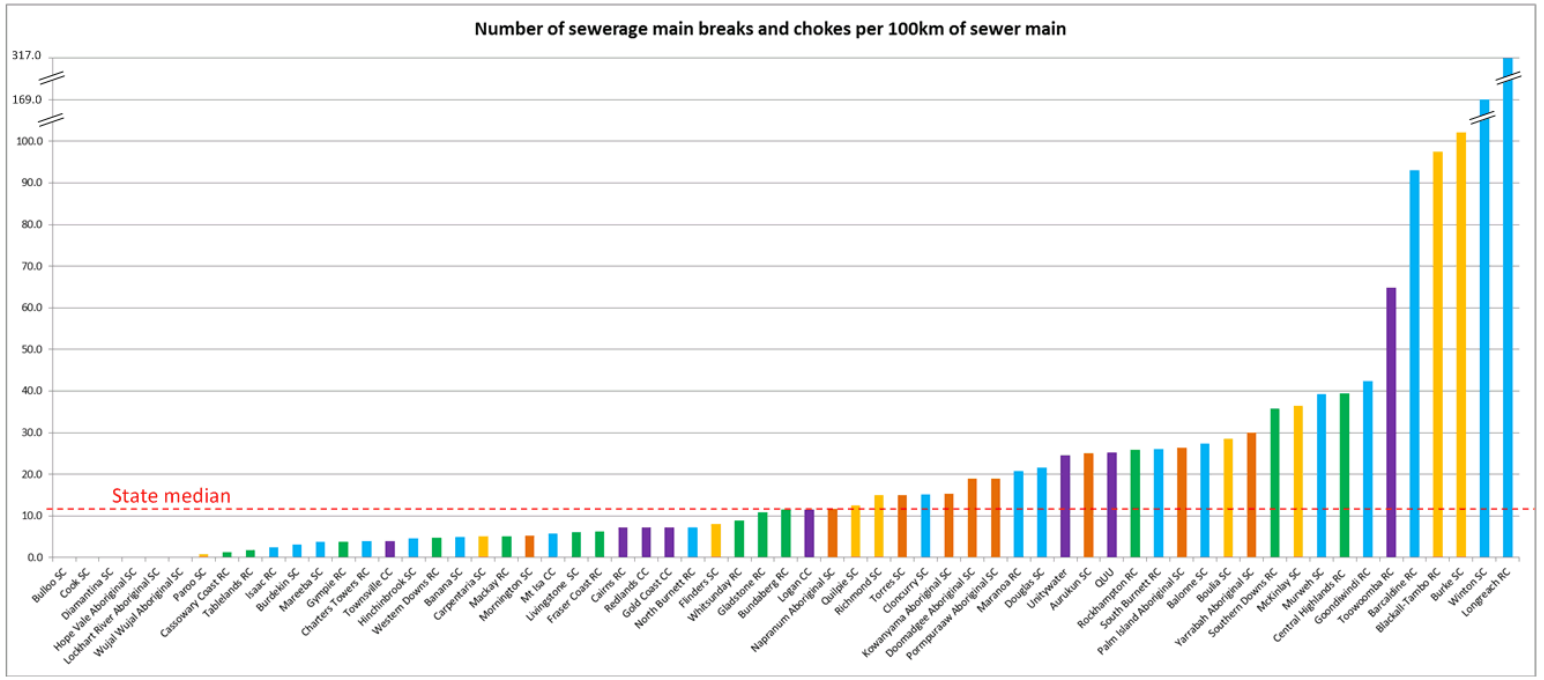


Figure 8. Number of sewerage main breaks and chokes per 100 km of sewer main[10].

Note: This figure shows ranked values for the number of sewerage main breaks and chokes per 100 km of sewer mains for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[11]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the number of sewerage main breaks and chokes is 11.4 per 100 km of sewer main. Each bar represents one SP.

[10] Note: figures for smaller SPs may be skewed towards higher values due to their relatively short main lengths.
[11] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

affected more by their internal reporting processes than the performance of their networks. There is also little correlation between the number of overflows and environmental outcomes because overflows must be reported regardless of size, duration or environmental impact.

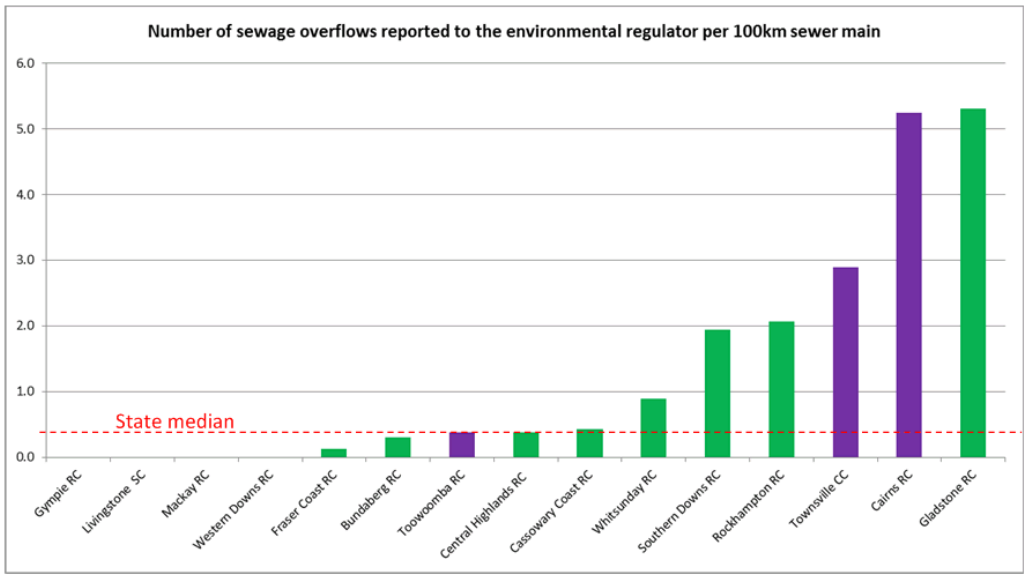


Figure 9. Number of sewage overflows reported to the environmental regulator per 100 km sewer main.

Note: This figure shows ranked values for the number of sewage overflows reported to the environmental regulator per 100 km sewer main for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (**green**), and extra-large SP with more than 50,000 connections (**purple**). The 2015/16 Statewide median value for the number of sewage overflows reported to the environmental regulator for these SPs is 0.4 per 100 km sewer main. Each bar represents one SP.

Potable Water Supply

Capacity and viability

The median value of the average reported annual potable water supplied per property for the State was 502 kL in 2015/16 which is similar to previous years (519 kL in 2014/15, 474 kL in 2013/14 and 509 kL in 2012/13) perhaps reflecting the ongoing drought across most of the State.

The reported total capital expenditure on water supply was $306,708,712 for 2015/16. The Statewide median for capital expenditure was $163 per property. In addition, the reported total operating costs to supply water from across the State was $1,298,720,130 at a median cost of $581 per property for the State.

Capital expenditure

Capital expenditure will vary markedly from year-to-year, particularly for Service Providers with a smaller number of water assets, but still provides a snapshot of investment across the industry.

Operating costs

Service Providers with cost reflective pricing and effective and efficient systems will have lower operating costs and thus provide better value for money to their customers. The components of operating cost (operation, maintenance and administration) are:

- Water resource access charge or resource rent tax.
- Purchases of raw, treated or recycled water
- Salaries and wages
- Overheads on salaries and wages
- Materials/chemicals/energy
- Contracts
- Accommodation
- All other operating costs that would normally be reported
- Items expensed from work in progress (capitalised expense items) and pensioner remission expenses
- Competitive neutrality adjustments, they may include but not be limited to, land tax, debits tax, stamp duties and council rates

Cost drivers for water supply

Service Providers that maintain major storage dams for their water supply have larger capital expenditure and operating costs.

The amount and type of treatment needed for the water sourced will affect the operating costs. However, larger water treatment plants can generally reduce this cost, relatively, through economies of scale.

The topography and location of the water supply will also affect operating costs through the amount of pumping needed to move the water to the treatment plant and then on to the customer and will have a relatively greater impact on small providers. High numbers of connections within urban areas provide economies of density which will help to reduce this cost, relative to Service Providers with widely spaced connections. With high levels of water pumping (e.g. in hilly areas) come associated increases in energy costs.

Service Providers with a number of separate water supply systems, larger areas of low density service (i.e. low numbers of properties serviced per km of main) and those with higher numbers of, and smaller, water treatment plants will generally need more employees and other resources to effectively manage their systems and thus have higher costs.

Maintenance costs of water supply pipe infrastructure is related to several factors, such as the age, type and condition of the assets, the soil reactivity (shrink-swell rating), water pressures and the density of connected properties.

Typical annual residential bill

The 'typical annual residential bill – water' is the dollar amount of the typical residential water bill for the financial year, including special levies. If the bill is cost-reflective and a Service Providers' operations are run as effectively and efficiently as possible, then the typical residential bill should be minimised and the Service Provider should be providing value for the community. The aim for a Service Provider should be to provide agreed levels of service at the lowest sustainable bill. Consideration of sustainability is important as

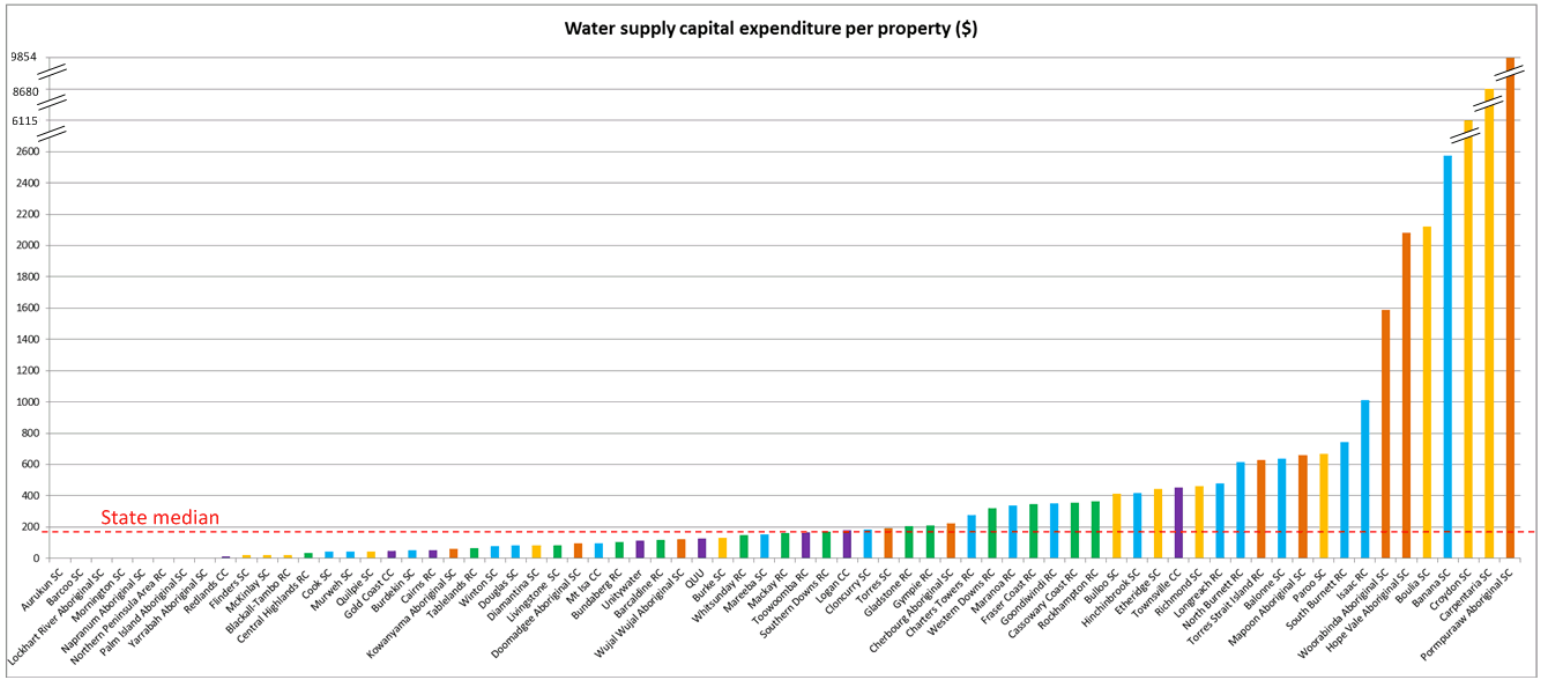


Figure 10. Water supply capital expenditure per property ($)[12].

Note: This figure shows ranked values of water supply capital expenditure per property ($) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[13]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for water supply capital expenditure is $163 per property. Each bar represents one SP.

[12] Note: figures for smaller SPs may be skewed towards higher values due to their very low populations.
[13] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

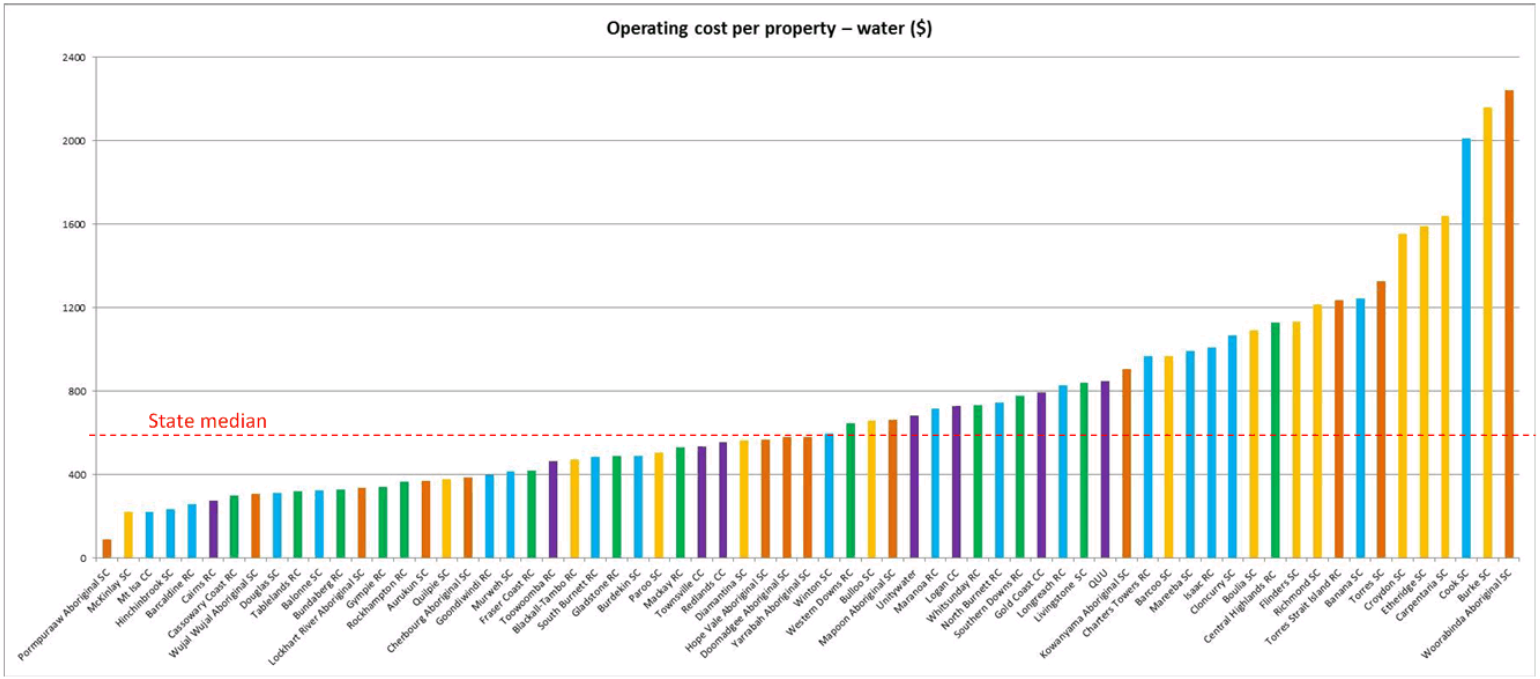


Figure 11. Operating costs per property – water ($)[14].

Note: This figure shows ranked values of operating costs per property – water ($) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[15]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for operating costs – water is $581 per property. Each bar represents one SP.

[14] Note: figures for smaller SPs may be skewed towards higher values due to their very low populations.
[15] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

there are incentives to either charge too little (e.g. to impress customers) or to charge too much (e.g. to increase returns).

This indicator is now only required to be reported as separate water and sewerage components by Service Providers with greater than 10,000 connections. The median typical residential bill for water supply by Service Providers with greater than 10,000 connections was $769. The typical annual residential bill (water and sewerage combined) is reported by all Service Providers and shown above in Figure 4.

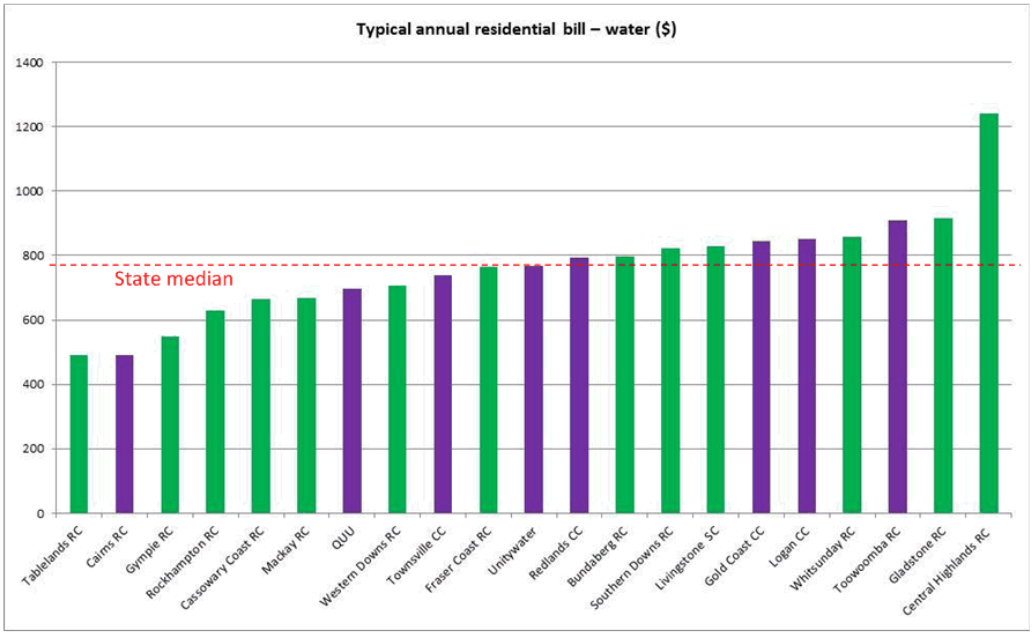


Figure 12. Typical annual residential bill – water ($).

Note: This figure shows ranked values of the typical annual residential bill – water ($) for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (**green**), and extra-large SP with more than 50,000 connections (**purple**). The 2015/16 Statewide median value for the typical residential bill – water for these SPs is $769. Each bar represents one SP.

Economic real rate of return

The financial performance of most Service Providers is intricately linked with their owner councils, making it difficult to assess the financial performance of the water supply operations specifically.

In addition, an important distinction must be made between the category of (usually larger) councils that can be categorised as financially sustainable and can generate dividends (return on capital) to support their communities, and the smaller and often more remote councils. In the latter, smaller populations (and thus rate bases) can mean that capital investment in water infrastructure is difficult and relies on funding assistance and subsidies from other sources of income. In some cases even operating costs can be difficult to meet.

One comparator of financial performance is the Economic Real Rate of Return (ERRR). The ERRR (water) is the revenue from water business operations less operating expenses for the water business divided by written down replacement cost of operational water assets. An appropriate value for ERRR is difficult to

determine for Service Providers but should be at least positive with a margin to allow for return on capital (NWC and WSAA, 2010). OTTER (2011) suggested that an ERRR of around 7% was required for full cost recovery in the Tasmanian urban water industry while the Productivity Commission questioned the appropriateness of NWC and NSW Office of Water definitions of full cost recovery as an ERRR "greater than or equal to zero" (see PC, 2011, p. 386).

ERRR is now only reported for Service Providers with greater than 10,000 water connections. The Statewide median value for ERRR (water) for these Service Providers was 4.4.

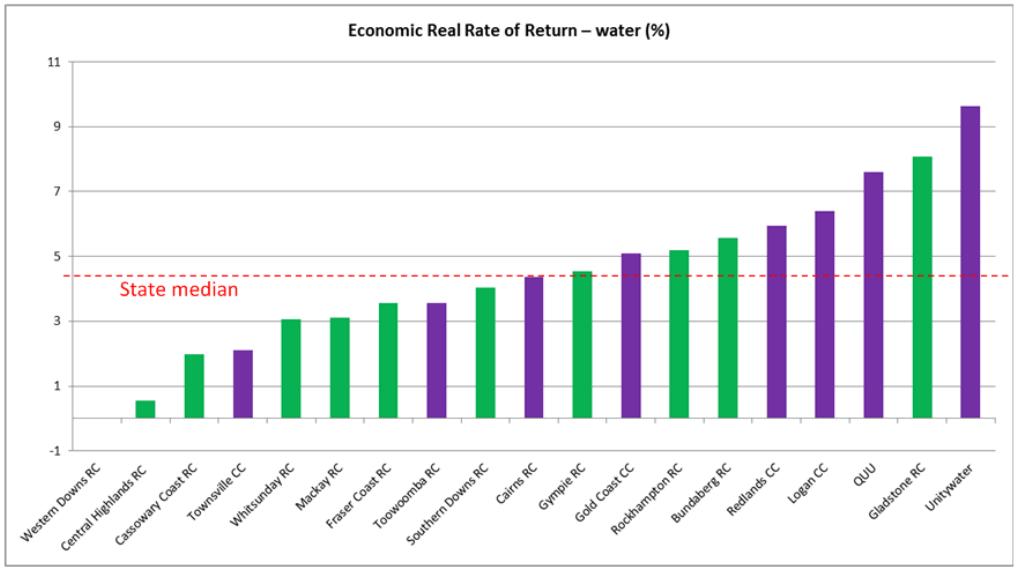


Figure 13. Economic Real Rate of Return (ERRR) – water (%).

Note: This figure shows ranked values of the ERRR – water (%) for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (**green**), and extra-large SP with more than 50,000 connections (**purple**). The 2015/16 Statewide median value for the ERRR – water for these SPs is 4.4%. Each bar represents one SP.

Customer service

Water complaints

As discussed above, water and sewerage complaints are no longer required to be reported separately (or broken down into sub-categories like service, billing, etc.). Water and sewerage complaints (combined) is reported by Service Providers and is discussed within the sewerage services section of this report (see Fig. 6).

Response time to water incidents

The average response time to water incidents was a new indicator for these reports since 2014/15. It has been reported previously but not since 2010/11. The Statewide median for the average response time for water incidents was 49 minutes but there is no 'ideal' response time as it varies depending on, the type of incident (e.g. emergencies should be treated faster than minor issues) and the distance to the area of concern. Response time to incidents is meant to provide an indication of customer service: no customer wants to be left waiting when they have a serious water or sewerage problem. Unfortunately, as with

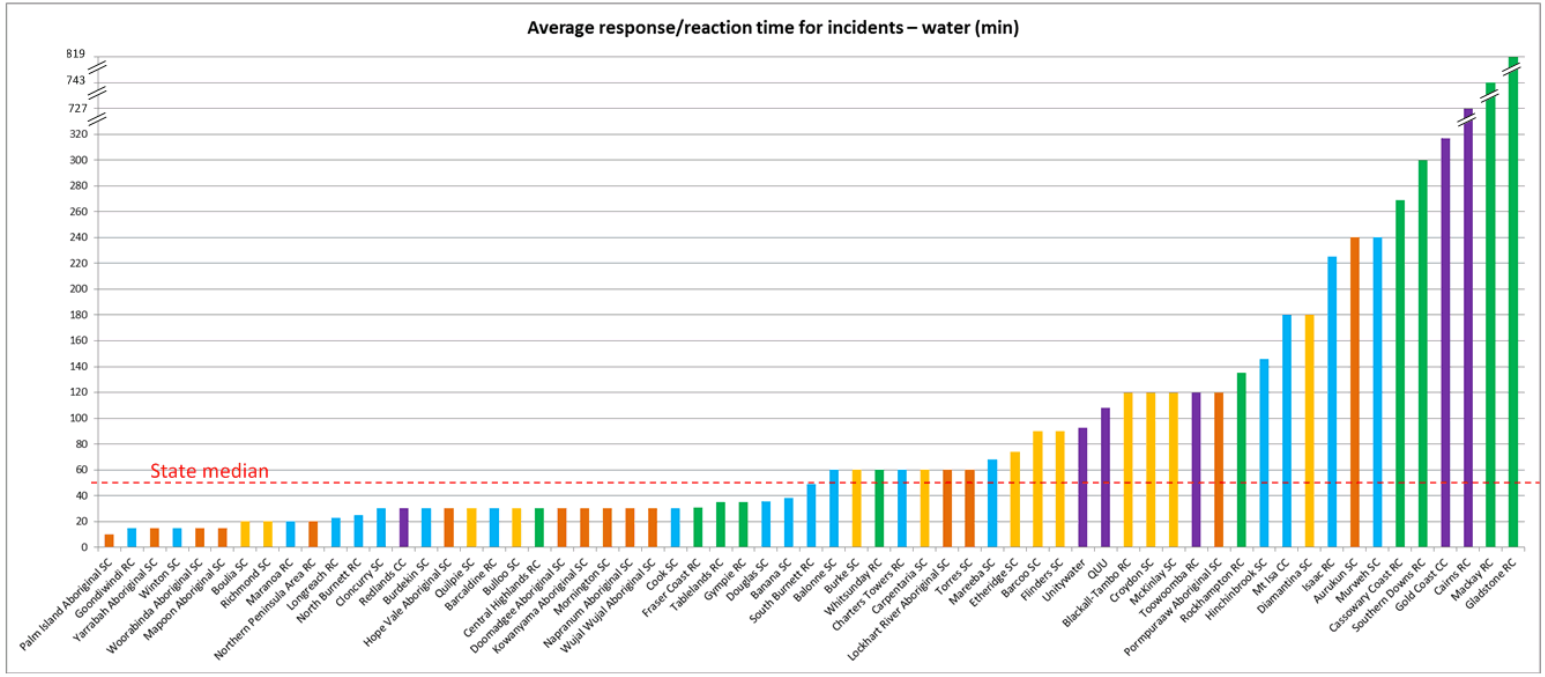
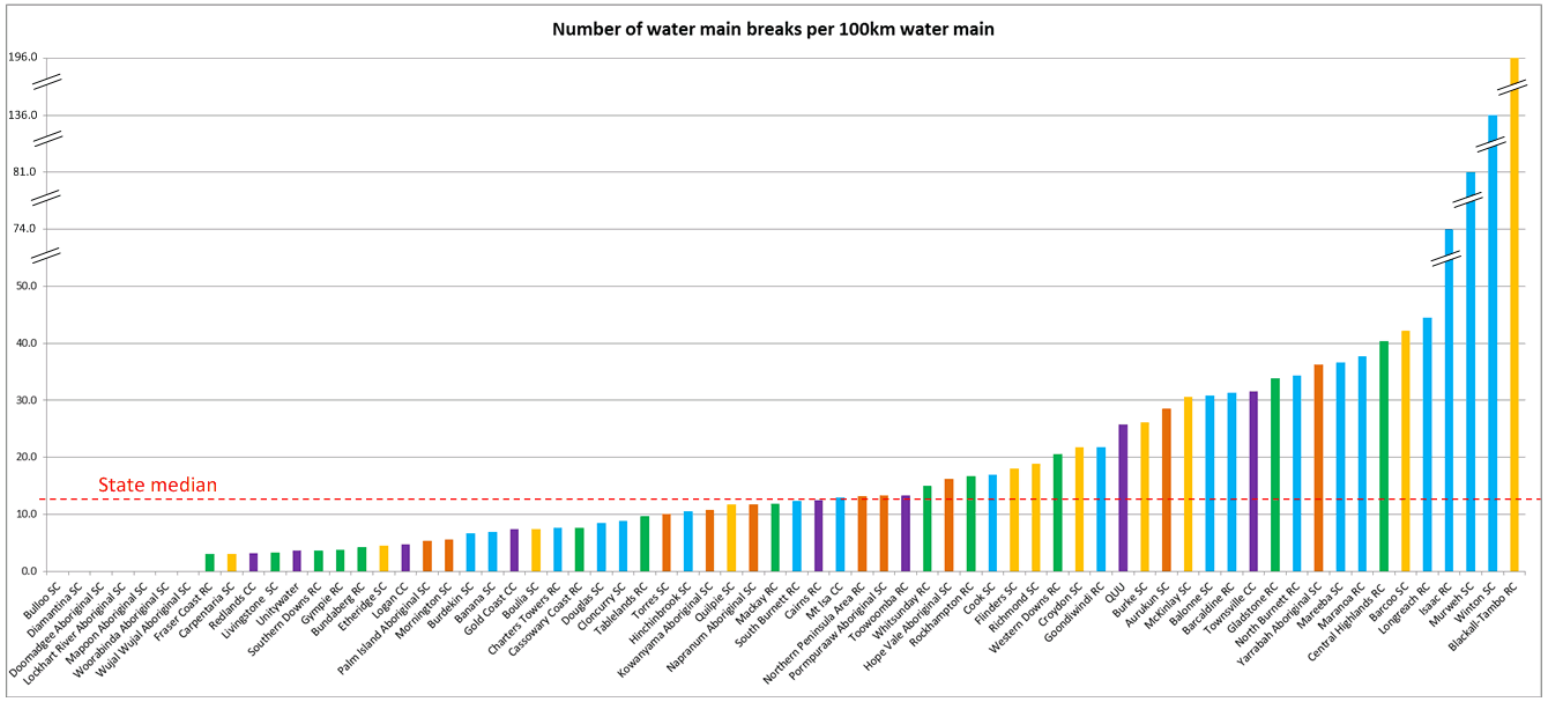


Figure 14. Average response/reaction time for incidents – water (min) [16].

Note: This figure shows ranked values for the average response/reaction time for incidents – water (min) for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[17]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the (average) response/reaction time for incidents (sewerage) is 49 minutes. Each bar represents one SP.

[16] Note: figures for smaller SPs may be skewed towards higher values due to their relatively short main lengths.
[17] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).



74**Figure 15.** Number of water main breaks per 100 km of water main[18].

Note: This figure shows ranked values for the number of water main breaks per 100 km of water main for each Service Provider (SP) who reported in 2015/16 in 4 groups based on the number of connected properties served – small SP with less than 1,000 connections (light orange (non-indigenous), dark orange (indigenous)[19]), medium SP with between 1,000 and 9,999 connections (blue), large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for the number of water main breaks is 12.1 per 100 km of water main. Each bar represents one SP.

[18] Note: figures for smaller SPs may be skewed towards higher values due to their relatively short main lengths.
[19] Note: Torres Strait Island Region Council is a 'medium' sized indigenous council (with 1,561 water connections).

'response times to sewerage incidents', there is no consistent interpretation of the definition, or more importantly, no guidance in the definition of which 'incidents' to include in the analysis. Therefore, comparisons among Service Providers are largely inappropriate.

Condition of assets

Water main breaks

The Statewide median for the number of water main breaks that were recorded per 100 km of main during 2015/16 was 12.1. This indicator can provide a rough surrogate for the condition and age of water main infrastructure although data may include breaks caused by third parties (e.g. excavation).

Real water losses

Real water losses is now only required to be reported by Service Providers with greater than 10,000 connections. The Statewide median for the amount of reported real water losses for these Service Providers for 2015/16 was 96 litres per service connection per day.

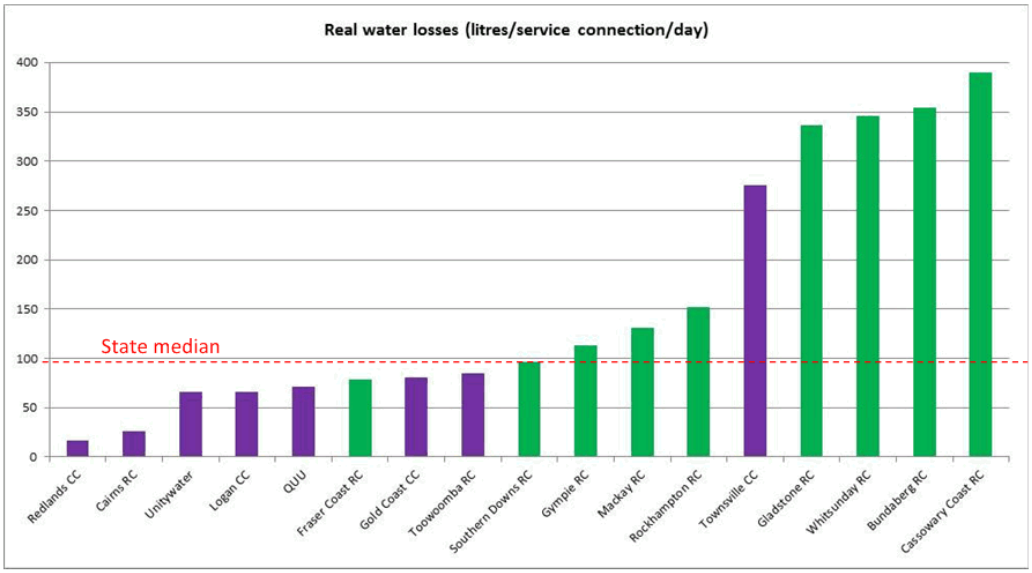


Figure 16. Real water losses (litres/service connection/day).

Note: This figure shows ranked values for real water losses (litres/service connection/day) for each Service Provider (SP) with greater than 10,000 connections who reported in 2015/16 in 2 groups based on the number of connected properties served – large SP with between 10,000 and 50,000 connections (green), and extra-large SP with more than 50,000 connections (purple). The 2015/16 Statewide median value for real water losses (litres/service connection/day) for these SPs is 96 litres per service connection per day. Each bar represents one SP.

References

NWC and WSAA (National Water Commission and Water Services Association of Australia). 2010. National Performance Report 2009-10: Urban Water Utilities, NWC, Canberra.

OTTER (Office of the Tasmanian Economic Regulator). 2011. Tasmanian Water and Sewerage State of the Industry Report 2009-10. Tasmanian Government, Hobart.

PC (Productivity Commission). 2011. Australia's Urban Water Sector, Report No. 55, Final Inquiry Report, Volume 1, Canberra.

Data used here was extracted from qldwater's SWIM database on 27/01/2017 as provided by Water Service Providers and The Department of Energy and Water Supply (DEWS) but qldwater ***and the WSP(s) involved offer no warranty as to its accuracy and are not liable for any loss or damage however caused, suffered or incurred by other parties in connection with the Data.***

FITZROY RIVER WATER OPERATIONAL REVIEW

Status of Improvement Actions

Meeting Date: 18 July 2017

Attachment No: 3

AECOM - FRW OPERATIONAL REVIEW

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
1	L	**SERVICE DELIVERY-BENCHMARKING** 1. Maintain (or continue to improve performance) current high level performance in the following Benchmark Parameters: □ Sewerage Capital Expenditure($/property) □ Operating Cost – Sewerage($/property) □ Typical Residential Bill –Sewerage ($) □ Economic Real Rate of Return– Sewerage (%) □ Water supply capitalexpenditure ($/property) □ Operating costs – Water ($/property) □ Typical residential bill – Water ($) □ Economic Real Rate of Return– Water (%) □ Typical Residential Bill – Water & Sewerage ($) □ Combined operating cost: water and sewerage ($/property) 2. Improve performance in the following benchmark parameters: □ Number of sewerage main breaks and chokes per 100 km of sewer main □ No. of sewage overflows reported (per 100 km sewer main) □ Number of water main breaks per 100 km of water main □ Real water losses (litres/service connection/day) □ No. of water & sewerage complaints (per 1,000 connections)	S	Mar-18		Supported. FRW is committed to continuing to improve its performance against all performance metrics within the prevailing financial constraints and with Value for Money for the community a top priority.	GM REG SVCS	J Plumb	
2	M	**SERVICE DELIVERY-WATER QUALITY/COMPLIANCE** Revise Hazard/Risk Assessment in DWQMP	S	Sep-17	100%	Supported. This is part of the normal DWQMP review process.	GM REG SVCS	J Plumb	
3	H	**CAPABILITIES/RESOURCES ASSESSMENT** FRW be considered a high priority as part of the role out of Succession and Talent Management plans for the whole of Council.	S	Sep-17		Supported. This will be progressed as part of a 'whole of Council' initiative.	GM REG SVCS	J Plumb	
4	H	**CAPABILITIES/RESOURCES ASSESSMENT** Review and address resourcing gaps in the current and new organisational structure of FRW.	S	Dec-16	100%	Supported and already underway. Restructure has been undertaken and implemented	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
5	M	**OPERATIONAL PROCESSES-SAFETY** Incorporate a "Safety Culture" approach.	S	Sep-17	100%	Supported. This action is being progressed in accordance with the Council's WHS plan.	GM REG SVCS	J Plumb	
6	M	**OPERATIONAL PROCESSES-TECHNOLOGY** Update Asset Management Plan to include framework for identification of future SCADA renewal / upgrade.	S	Apr-17		Supported. This will be completed as part of the next annual review of the AMP.	GM REG SVCS	J Plumb	
7	M	**OPERATIONAL PROCESSES-TECHNOLOGY** Review asset register to ensure all SCADA infrastructure is included and up-to-date.	S	Sep-17		This will be completed at the end of the current SCADA upgrade project.	GM REG SVCS	J Plumb	
8	L	**OPERATIONAL PROCESSES-TECHNOLOGY** Investigate and if found feasible prepare a business case for the implementation of mobile computing.	S	Sep-18	100%	Mobile Strategy is included in Council's IT Strategy	GM REG SVCS	J Plumb	
9	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress AM Policy Development from "Core-Intermediate" to "Advanced"	S	Sep-19	100%	This action is being progressed as part of a 'whole of Council' initiative.			
10	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Levels of Service and Performance Maturity Goal within. Management from 'Intermediate' to 'Advanced'	S	Sep-19	10%	The actions are to be included into RRC Asset Improvement Plan for all Asset classes.	GM REG SVCS	J Plumb	
11	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Demand Forecasting from 'Intermediate' to 'Advanced'	S	Sep-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
12	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Asset Register Data from 'Core' to 'Advanced'	S	Sep-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
13	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Asset Condition from 'Core' to 'Advanced'	S	Sep-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
14	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Decision Making from 'Basic' to 'Core'	S	Sep-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
15	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Risk Management from 'Basic-Core' to 'Intermediate'	S	Sep-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
16	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Operational Planning from 'Core' to 'Intermediate-Advanced'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
17	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Capital Works Planning from 'Basic-Core' to 'Intermediate'	S	Jun-19		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
18	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Financial and Funding Strategies from 'Basic' to 'Core'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
19	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress AM Teams from 'Core' to 'Advanced'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
20	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress AM Plans from 'Basic' to 'Intermediate'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
21	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Management Systems from 'Basic' to 'Core'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
22	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Information Systems from 'Core' to 'Intermediate'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
23	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Service Delivery Mechanisms from 'Core' to 'Intermediate'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
24	M	**OPERATIONAL PROCESSES-ASSET MANAGEMENT** Progress Improvement Planning from 'Aware' to 'Advanced'	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
25	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects.	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
26	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels.	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
27	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Carry out an annual review of projects scopes and estimates and provide more detail / confidence as project move into different forecast periods.	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
28	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Develop a detailed Capital Project Delivery resourcing plan for the next 5 years incorporating internal and external resources	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
29	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Improve / develop more robust capital project delivery plan for 2016 /17 financial year	S	Dec-16	100%	Completed.	GM REG SVCS	J Plumb	
30	M	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Hold regular (fortnightly / monthly) capital project delivery meetings with all project delivery staff	S	Feb-17	100%	Implemented. The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30	GM REG SVCS	J Plumb	
31	L	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Incorporate options for Project Management accreditation (i.e. under Australian Institute of Project Management (AIPM))	NS			Not required.	GM REG SVCS	J Plumb	
32	L	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Provide internal training on Council procurement systems and requirements for Project Delivery staff.	S	Dec-17	100%	This is already in place.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
33	L	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Provide internal, external and on the job Contract Administration / Management training for Project Delivery staff.	NS	Jun-18	100%	Supported	GM REG SVCS	J Plumb	
34	H	**OPERATIONAL PROCESSES-PLANNING & CAPITAL DELIVERY** Integrate formalised project closure and review procedures into medium to high risk projects.	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
35	H	**OPERATIONAL PROCESSES-EMERGENCY MANAGEMENT** Revise, finalise and implement an Emergency Response Plan	S	Sep-17		Supported. A revision of the Business Continuity Plan is currently nearing completion.	GM REG SVCS	J Plumb	
36	M	**ORGANISATIONAL REVIEW-STRATEGIC DIRECTION** That FRW update its Strategic Direction having regard to the goals developed during the course of this assignment.	S	Dec-17		Mid 2017.	GM REG SVCS	J Plumb	
37	M	**ORGANISATIONAL REVIEW-STRATEGIC DIRECTION** That FRW consider creating a separate Strategic Plan that aligns with Council's Strategic Plan and sits over the top of and guides the annual Performance Plan.	NS			Not supported	GM REG SVCS	J Plumb	
38	H	**ORGANISATIONAL REVIEW-OPERATING MODEL** That the FRW structure be realigned based on grouping of outputs to help enable FRW to be accountable key activities relating to being a water supply and sewerage business activity	S	Apr-17	100%	Restructure implemented	GM REG SVCS	J Plumb	
39	L	**ORGANISATIONAL REVIEW-OPERATING MODEL** That Council investigates the feasibility of amending the status of FRW from a Significant Business Activity to a "Discrete Business Unit of Council" complying with "Full Cost Pricing" principles.	NS	Sep-17		Not supported	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
40	M	**ORGANISATIONAL REVIEW-GOVERNANCE** That Council consider establishing an "**Asset Management Advisory Committee**" to assist it with the oversight of managing its entire asset base	NS			Not supported	GM REG SVCS	J Plumb	
41	M	**ORGANISATIONAL REVIEW-GOVERNANCE** That Council consider either establishing a **Board Sub-Committee** and/or an Organisational Steering Committee that would have oversight of planning across then whole of the water cycle, with the objective of driving more holistic, optimal and cost effective decision making in that regard	NS			Not supported	GM REG SVCS	J Plumb	
2.1	M	**ASSET MGT POLICY DEVELOPMENT** Review the Asset Management policy to make it succinct. Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain: - Asset Management objectives; - the scope of the Asset Management System; - the relationship between organisational objectives and asset management objectives; and - define the framework required to achieve the asset management objectives.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
2.2	M	**LEVELS OF SERVICE & PERFORMANCE MGT** Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
2.3	M	**DEMAND FORECASTING** Revise Asset Management Plans to provide: - water and sewer demand forecasts including difference demand scenarios; - **risk assessments** and identification of demand gaps for each scenario; and - **risk** mitigation measures / asset and non-asset solutions for addressing demand gaps.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
2.4	M	**ASSET REGISTER DATA** Develop and implement asset data collection program for inclusion in the Asset Management Plan.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
2.5	M	**ASSET CONDITION** Develop and implement a condition assessment strategy for all water and wastewater assets.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
3.1	M	**DECISION MAKING** Developing a Capital Works Prioritisation Methodology with **risk frameworks** for selection and prioritisation of projects (Refer Recommended Action No. 26).	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
3.2	M	**RISK MANAGEMENT** Develop and apply methology for assessing all water and wastewater assets criticalities. Undertake formal asset **risk assessment**. Amend Asset Management Plans to include a section on risk assessment. Section to include a summary of the formal asset riskassessment process and findings.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
3.3	M	**OPERATIONAL PLANNING** Undertake formal asset **risk assessment**. Develop improvement plan and assessment criteria for all operational processes.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
3.4	M	**CAPITAL WORKS PLANNING** Developing a Capital Works Prioritisation Methodology with risk frameworks for selection and prioritisation of projects (Refer Recommended Action No. 25). Review and refine Capital Project scope and cost estimates for all projects to provide more detailed / clearer scopes and greater budget confidence levels (Refer Recommended Action No. 26).	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
3.5	M	**FINANCIAL & FUNDING STRATEGIES** Amend Asset Management Plans to include data confidence levels and assumptions made for the valuations and financial forecasts.	S	Jun-19		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
4.1		**ASSET MANAGEMENT TEAMS** Complete a formal review of current Asset Management resourcing, roles (position descriptions) and gaps in requirements. Develop in consultation with the General Manager of Regional Services, a plan for addressing these gaps.	S	Jun-18		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
4.2	M	**ASSET MANAGEMENT PLANS** In the next revisions of AMPs: Revise LoS section within Asset Management Plans to include LoS statements and performance targets for the planning period. Revise Asset Management Plans to provide: - water and sewer demand forecasts including difference demand scenarios; - **risk assessments** and identification of demand gaps for each scenario; and - **risk** mitigation measures / asset and non-asset solutions for addressing demand gaps. Amend Asset Management Plans to include a section on **risk assessment**. Section to include a summary of the formal asset **risk assessment** process and findings. Amend Asset Management Plans as per the following: - Within the Lifecycle Management Plans section , separate asset information into its own section (to follow Levels of Service); - Asset description section to include information on asset attributes, condition, performance, criticality and valuations; - In relation to lifecycle strategies, provide information on current and future routine and non routine	S	Jun-18		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
4.2 Contd	M	* maintenance; and * include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.					GM REG SVCS	J Plumb	

REC #	RISK RATING/PRIORITY	AUDIT OBSERVATION / RECOMMENDATION or OPPORTUNITY (AGREED IMPROVEMENT ACTION)	SUPPORTED (S) or NOT SUPPORTED (NS)	Completion Date	% COMPLETE	MANAGEMENT COMMENT	GENERAL MANAGER RESPONSIBLE	MANAGER NAME	ACTIONING OFFICER
4.3	M	**MANAGEMENT SYSTEMS** Develop a Quality Management System for asset management and project delivery. Including the following as discussed in the Capital Planning and Delivery section: - Review of Technical Specifications; - Quality control framework for works constructed internally; - Framework for project management / delivery framework; and - standardised templates, forms and processes for Contract Administration / Management Review and enhance the Asset Management Strategy to make it succinct and to ensure it meets the requirements of ISO 5001 and IIMM. The strategy should contain: - Asset Management objectives; the scope of the Asset Management System; - the relationship between organisational objectives and asset management objectives; and - define the framework required to achieve the asset management objectives.	S	Jun-18		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	
4.4	M	**INFORMATION SYSTEMS** Investigate potential for integration of GIS into Asset Management System.	S	Dec-17	100%	This requirement has been included into AIMIS specifically. Council is currently evaluating 2 systems.	GM REG SVCS	J Plumb	
4.5	M	**SERVICE DELIVERY MECHANISMS** Refer Capital Planning and Delivery section.	S	Jun-18		The FRW review made a series of recommendations relating to capital. A review of current capital policies will be undertaken and a new framework will be developed by 30 June 2018.	GM REG SVCS	J Plumb	
4.6	M	**IMPROVEMENT PLANNING** Amend the Asset Management Plans to include information on plan improvement responsibility, resources and timeline within the 'Improvement Plan' section.	S	Jun-18		All the actions identified are elements of an Asset Maturity Assessment. From this Maturity Assessment an Asset Improvement Strategy will be delivered.	GM REG SVCS	J Plumb	

8.7 SUPPORT FOR FRW EMPLOYEE TO ATTEND INTERNATIONAL CONFERENCE

File No:	**1466**
Attachments:	**Nil**
Authorising Officer:	**Peter Kofod - General Manager Regional Services**
Author:	**Jason Plumb - Manager Fitzroy River Water**

SUMMARY

An opportunity has arisen for an FRW employee to attend an international conference as a representative of Council and present a paper at the 10th International Conference on Energy Efficiency in Motor Driven Systems in Rome. The paper to be presented builds upon the extensive work being done by FRW to achieve significant improvements in energy efficiency in its operations by providing new insights into the theory of measuring and managing energy efficiency in pumping applications. Council approval and support for this conference attendance is sought so that it can provide a personal development opportunity for the employee, promote Council's focus on energy efficiency, and provide an opportunity for new knowledge to be gained from this leading international conference for the benefit of Council and the community.

OFFICER'S RECOMMENDATION

THAT Council approve the attendance for Troy Leyden at the 10th International Conference on Energy Efficiency in Motor Driven Systems in Rome in September 2017 and the allocation of $1500 towards covering the expenses to attend the conference.

COMMENTARY

FRW has a strong focus on improving the energy efficiency of its water and sewerage operations and reducing the approximately $3 million electricity costs incurred annually. Improved energy efficiency has the direct benefit of reducing operating costs through reduced electricity usage, but it also leads indirectly to other benefits such as reduced maintenance and longer equipment life and therefore reduced capital cost.

Troy Leyden a Mechanical Engineer within the FRW team working on energy efficiency improvements recently identified in his own time a novel method to describe the relationship between power usage and the most efficient pumping performance in order to better manage and optimize energy efficiency. The completion of this work was largely done as an extension to his work at FRW but is highly relevant to this ongoing focus area. This method has been written as a brief technical paper which was published as an article in an Australian Water Association online publication and Troy was encouraged to submit the paper for consideration in other relevant conferences.

The paper has now been accepted for inclusion on the 10th International Conference on Energy Efficiency in Motor Driven Systems being held in Rome in September 2017 and Troy has intent to attend the conference in combination with the taking of annual leave to enable him to visit other overseas destinations. On the basis of the potential benefits to Council from this conference opportunity as well as the excellent opportunity for Troy to develop professionally from this experience, FRW is supportive of this opportunity for Council to be represented at this international conference and as such supports a contribution towards covering the expenses incurred to attend the conference. In accordance with Council policy, Council approval is required for any overseas travel by employees for work purposes.

BUDGET IMPLICATIONS

If Council approval if provided for attendance at this conference, an amount of $1,500 will be made available from the 2017/18 budget towards covering the direct cost of attending the conference.

This amount is consistent with the level of expenditure that is normally covered for employees to attend conferences in Australia although in this instance it would not include airfares. This is considered reasonable given that the employee has already indicated the intent to travel overseas for annual leave.

STAFFING IMPLICATIONS

The intent of this proposed travel is that it will be done in conjunction with annual leave. As such there are no significant staffing implications.

CORPORATE/OPERATIONAL PLAN

This opportunity is consistent with Council's Operational Plan actions associated with improving energy efficiency and generating positive environmental outcomes.

CONCLUSION

Council approval is required to support the attendance at an international conference on energy efficiency by an employee working within FRW. Representation at this conference represents an excellent opportunity for the employee and for Council.

9 NOTICES OF MOTION

Nil

10 URGENT BUSINESS/QUESTIONS

Urgent Business is a provision in the Agenda for members to raise questions or matters of a genuinely urgent or emergent nature, that are not a change to Council Policy and can not be delayed until the next scheduled Council or Committee Meeting.

11 CLOSURE OF MEETING