

Executive Summary: Water and Waste Services Performance Management Report June 2011

The formal trial of our new water meter reading system with Taggle Systems has commenced with 200 installations occurring in the Slade Point area. Results to date are very encouraging with a presentation on the results programmed to be presented at the Northern Australian Water Association conference being held in Mackay on the 8th & 9th September.

Councillor Comerford as chair of the CTM Water Alliance attended Canberra recently to receive the National Award for Local Government in the category of Asset and Financial Management for the CTM Water Alliance Best Practice Pricing and Financial Sustainability Model. The CTM Water Alliance is progressing along with staff recently getting together to discuss alignment of electrical standards.

Continued dry weather throughout June has allowed significant progress on capital projects throughout the region. The Nebo Road Water Treatment Plant has been in commissioning all of June and met all its specific requirements. There are a number of relatively minor punch list items to have rectified as part of the commissioning process. Close out works including roadways have continued with demobilisation from site scheduled for late July.

Construction is progressing well on the works for Cell 2 at Hogan's Pocket. The Landfill Gas Project has completed some initial test sampling and these will be assessed in the coming month and results presented to council in early August.

Work was also spent on finalising the 11/12 Budget and associated documents and also further expansion of the Safe Plan roll out to all programs within Water & Waste Services. The Safe Plan results for June were good.

Work on reviewing the format of the monthly report for Water Services has been completed. The proposed new report will look to move to a more graphical representation that is more exception based reporting.

Director Water and Waste Services

**Performance Management Report
June 2011**

Table of Contents

1	<i>BUSINESS SERVICES</i>	3
1.1	<i>Finance</i>	3
1.2	<i>Customer Service</i>	5
1.3	<i>Human Resource Management</i>	10
1.4	<i>Work Place Health & Safety</i>	11
1.5	<i>Systems and Processes</i>	122
1.6	<i>Governance</i>	122
1.7	<i>Communication</i>	122
1.8	<i>Scientific and Analytical Services (SAS)</i>	133
2	<i>PLANNING AND SUSTAINABILITY</i>	155
2.	<i>Strategic Infrastructure Planning</i>	155
3	<i>INFRASTRUCTURE DELIVERY</i>	188
4	<i>OPERATIONS</i>	22
4.1	<i>Water Treatment System Performance</i>	22
4.2	<i>Water Quality</i>	286
4.3	<i>Wastewater Treatment System Performance</i>	308
4.4	<i>Network Reticulation Systems</i>	36
5	<i>WASTE SERVICES</i>	41

1 **BUSINESS SERVICES**

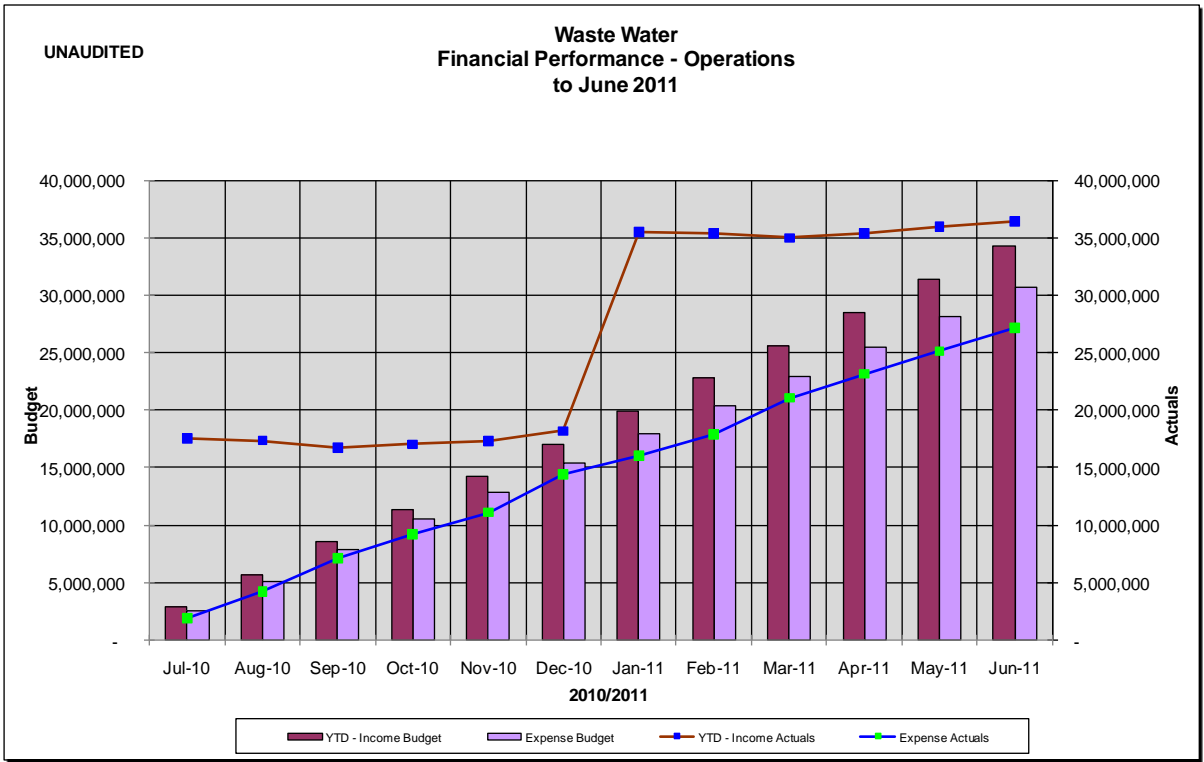
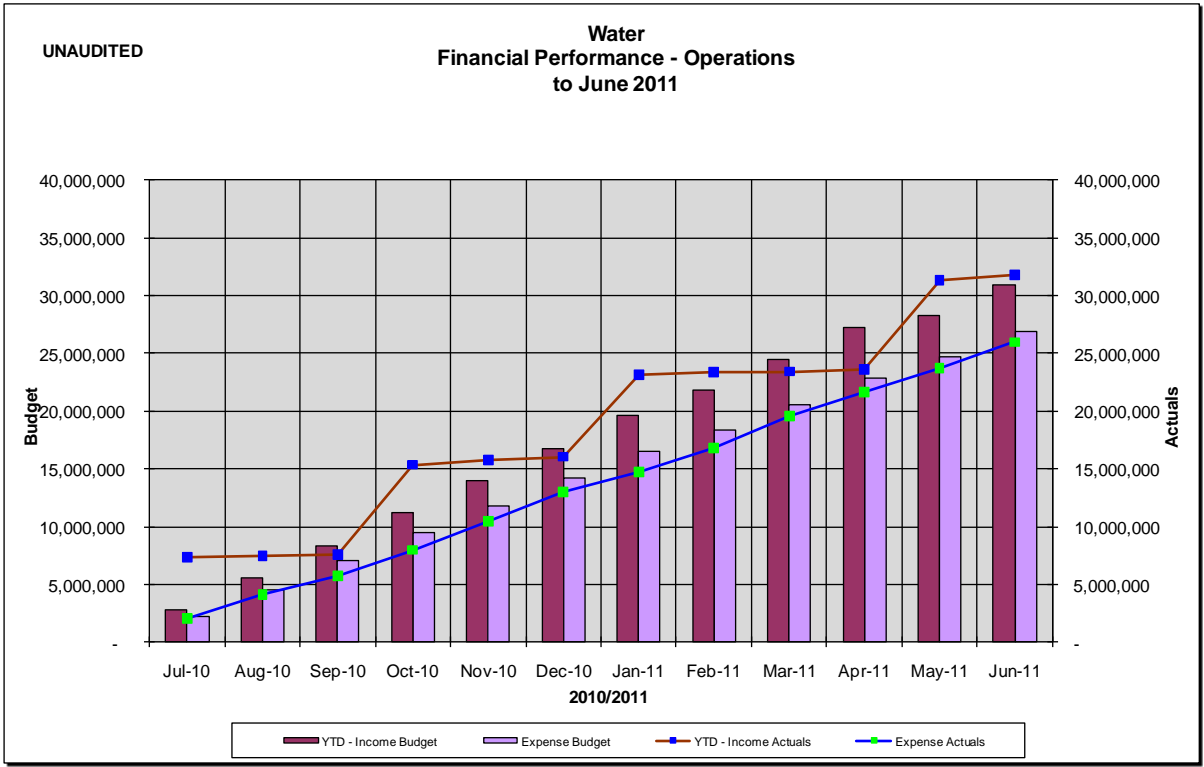
1.1 **Finance**

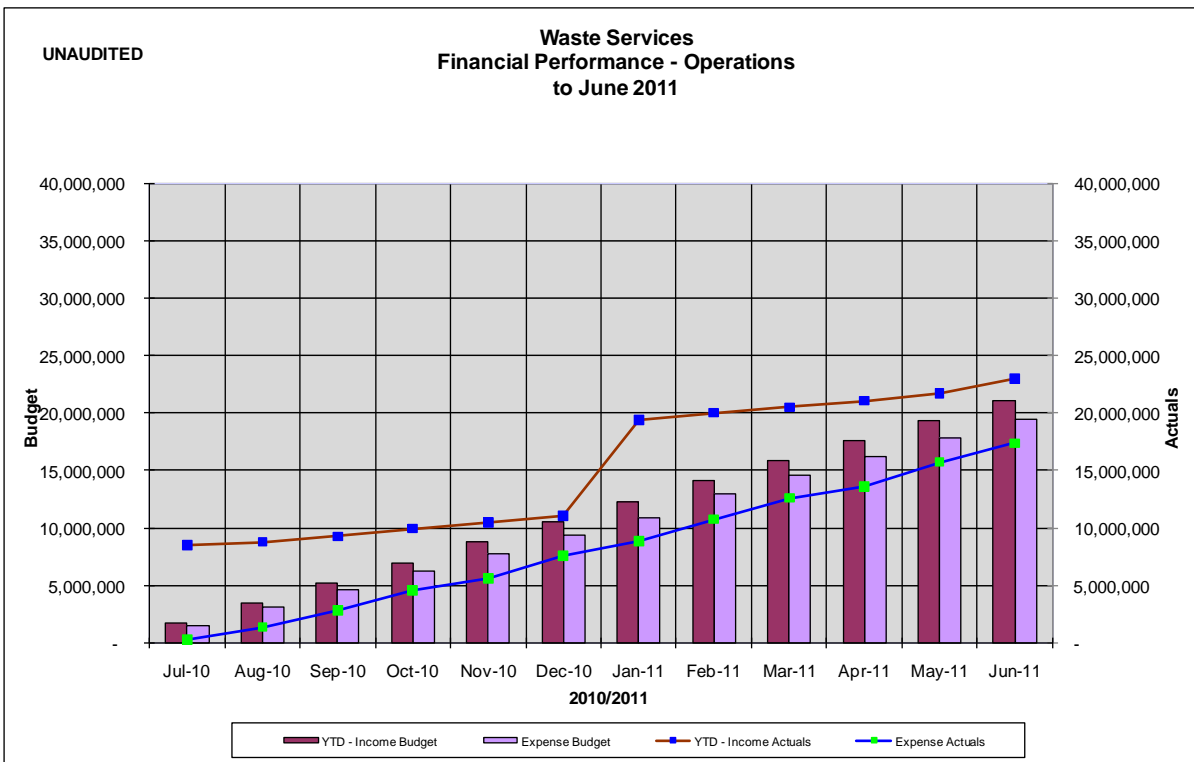
The financial performance figures for Water and Waste Services Business Units will be included in the Executive Monthly Financial Report, produced by the Corporate Services department.

Financial Performance of Individual Business Unit Areas in '000's:

Performance Area	10/11 Budget			Actual	Comment
	Original	Revised	YTD		
Water					
Revenue	33,559	30,903	30,903	31,827	
Expenditure	27,203	26,891	26,891	25,984	
Wastewater					
Revenue	34,123	34,237	34,237	36,394	
Expenditure	30,389	30,654	30,654	27,156	
Waste					
Revenue	20,966	21,089	21,089	23,005	
Expenditure	18,338	19,468	19,468	17,365	

The Revenue and Expense information is graphically displayed below.





*Left to Right -
Ken Diehm, Director Commercial Businesses, Townsville City Council
The Hon Simon Crean MP, Minister for Regional Australia, Regional Development and Local Government and
Cr Deirdre Comerford, Chair Cairns Townsville Mackay (CTM) Water Alliance Executive*

In Canberra to receive the National Award for Local Government in the category of Asset and Financial Management for the CTM Water Alliance Best Practice Pricing and Financial Sustainability Model.

1.2 Customer Service

Customer Service Requests

A summary of the customer requests that have been received through the Pathways System for the month are detailed in the table below:

Monthly Report June 2011						
Customer Request System - Pathways						
				Jun-11	TOTALS - YTD 20102011	
Statistics for Water						
Request Category	Ordinary Request	Call-Out Request	Total Request	Total Ordinary Request Y-T-D	Total Call-Out Requests Y-T-D	Total Requests Y-T-D
Fire Hydrant or Service Valve Damaged/Leaking	9	2	11	89	33	122
Water Service - Backflow Prevention Devices	2	-	2	10	-	10
Water Main - Broken/Leaking	11	12	23	147	146	293
Water Main - Replacement				4	9	13
Water Meter - Broken/Leaking	57	25	82	1,098	297	1,395
Water Miscellaneous	17	1	18	210	25	235
No Water	8	6	14	50	62	112
Low Water Pressure	9	1	10	68	9	77
Dirty Water / Cloudy Water	6	-	6	58	13	71
Water Odour/Taste/Smell	1	-	1	19	5	24
Public Amenities	23	3	26	208	12	220
Repair Park & Rec facilities - exclude public amenity	5	-	5	15	4	19
Water meter rewasher or leaky stopcock	18	2	20	215	25	240
Water Service Broken/Leaking	90	24	114	763	210	973
Water Service Replacement				2	-	2
Water Service - Subsidence in Ground				-	-	-
MRC Community Hall Repairs				1	2	3
Repair to MRC Pensioner Cottage				13	-	13
Alleged Breach of Water Restrictions				5	-	5
Water Leak				7	-	7
Drinking Fountains				18	2	20
WATER TOTAL	256	76	332	3,000	854	3,854
Statistics for Sewer						
Broken Manhole	2	-	2	17	5	22
Building Over Sewer Enquiries				-	-	-
Hit through sewer pipe / Breaks				-	2	2
Sewer Miscellaneous	3	-	3	86	27	113
Sewerage Overflows/Spillage	3	1	4	95	46	141
Public Toilets				-	-	-
Pump Station Faults				-	-	-
Sewerage Blockage	5	3	8	117	61	178
Sewerage Smell	4	-	4	23	3	26
Subsidence in Ground	3	2	5	38	6	44
Copies of Plans & Sewer Plans & Depths	79	-	-	907	1	908
SEWER TOTAL	99	6	26	1,283	151	1,434
GRAND TOTAL	355	82	358	4,283	1,005	5,288

Other Customer Service Activities:

Item	No.
Water Restriction Exemptions Processes	-
Rebate Applications Processes	-
Water Restriction Enquiries Received	4
Inflow/Infiltration Enquiries Received	1
Trade Waste Enquiries Received	47
Backflow Enquiries Received	110

Water Meter Applications

A summary of the water meter applications that have been processed are detailed in the table below:

Water Meter Applications for period ended 30 June 2011

	Applications Lodged				Applications Finalised				Applications Outstanding			
	20 mm	25 mm	>25 mm	Total	20 mm	25 mm	>25 mm	Total	20 mm	25 mm	>25 mm	YTD
Bal b/f 09/10				0				0	13	0	0	13
Jul-10	62	0	7	69	61	0	6	67	14	0	1	15
Aug-10	62	0	6	68	59	0	6	65	17	0	1	18
Sep-10	61	0	2	63	58	0	2	60	20	0	1	21
Oct-10	55	0	3	58	54	0	3	57	21	0	1	22
Nov-10	54	0	13	67	54	0	12	66	21	0	2	23
Dec-10	38	0	3	38	38	0	3	41	21	0	2	23
Jan-11	21	0	8	29	20	0	8	28	22	0	2	24
Feb-11	50	0	6	56	50	0	6	56	22	0	2	24
Mar-11	49	0	12	61	47	0	11	58	24	0	3	27
Apr-11	63	0	2	65	60	0	2	62	27	0	3	30
May-11	61	0	7	68	57	0	6	63	31	0	4	35
Jun-11	72	0	7	79	22	0	1	23	81	0	1	82
Total 00/11	648	0	76	721	580	0	66	646	81	0	10	88

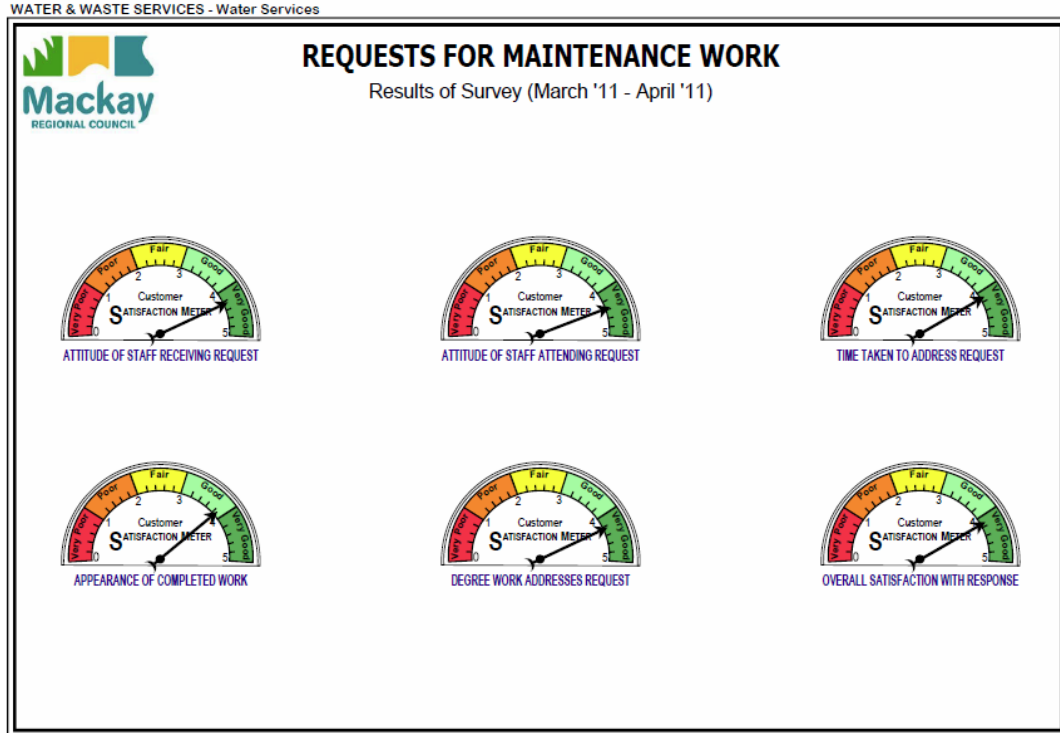
Backflow Licensing

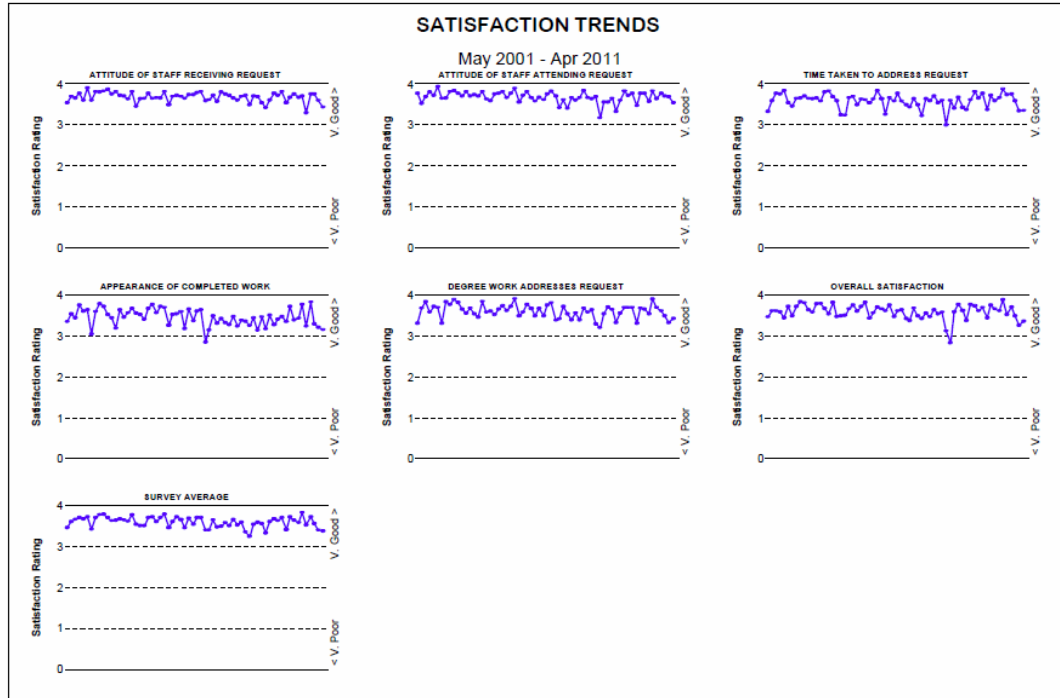
June 2011	Month	YTD
Active Devices (start of F/Year)		
New Devices Registered	8	
Total Devices		2421
Tested by Council Plumber	6	
Tested by Private Plumber	101	
Total Tested	107	
Overdue for Testing to 31/05/2011.		678
Testing Notices Sent out	178	
License Fees Invoiced		129,056
Outstanding License Fees		61,699

- 2nd Test Reminder Letter template has been finalised and is ready for distribution. These letters will be sent out in early July.
- An initial lodgment letter is being drafted up and a fee discussed for new devices found on properties.

Customer Satisfaction Survey Results

The following customer service survey results were obtained for the month.





Thursday, June 16, 2011 © Mackay Regional Council

1.3 Human Resource Management

Training:

Numbers Only As Available From Chris 21 - 6 July 2011

Course Name	No.
Compulsory Training	
Bedford Rd Induction	
MRC Induction	13
Harassment / Discrimination	2
CPR	0
Asbestos Removal License Class B	5
MUTCD Traffic Cont stop/slow	20
Professional Development	
Cert 1V Civil Construction	1
Computer training Excel Level 1	2
Computer training Microsoft Project Lev 1	1
Computer training Pathway	1
Diploma Local Gov Admin	1
Water Industry Ops Workshop & Ex	2
Safe Plan Take 5 Training by Supervisors/Managers	
SP 2.8.1 WH&S Issue Resolution	2
SP 3.3.1 1 st Aid Management	48
SP 3.4.1.3 Skin Penetrating Injuries	54
SP 3.4.1.4 Personal Hygiene	51

SP 3.4.1 Immunisation	62
SP3.4.2 Sharps Disposal	61
SP 3.5.1.1 Training	9
SP 3.7.1 Purchasing Requirements	53
SP 3.8.1 Contractor Controls	49
SP 4.4.1 Management of PPE	17

Hazard Inspections & Rectifications:

NRR = No Record Received

Scheduled For Month Of June 2011

Inspections	Scheduled / Matrix	Inspection Completed	RAP Issued	Proposed Inspection Date
Admin Office Bedford Rd	June 11	06.07.11	06.07.11	n/a
Mech & Elec Workshop	June 11	NRR	NRR	Rescheduled
Treatment Vehicle Ready for work	June 11	NRR	NRR	NRR
Nebo Rd	June 11	NRR	NRR	NRR
Waste Facilities South	June 11	NRR	NRR	NRR

1.4 Work Place Health & Safety

Incident Reports:

Incident Type	No.
No Time Lost (NTL)	0
Medically Treated Injury (MTI)	0
Lost Time Injury (LTI)	1
Non Injury Incident (NII) - Near Miss	3
Public Incident	0
Contractor (non staff)	1
Contractor	0

Safety cultural change was supported through:

- Ongoing coaching/training of new administration staff and supervisors regarding the effective management and recording of Tool Box Talks
- Deliver Bedford Road Induction to new employees
- Training and ongoing coaching delivered to supervisors and management regarding Hazard Inspections, Monthly Action Plans and Take 5 delivery
- Safe Plan liaison role to assist supervisors achieve mandatory Monthly Action Plans
- Data entry for Safe Plan MAPs
- Gas detector instruments and associated docking stations delivered and installed at 14 locations across the region. Only two of the fleet allocated to the

Waste Water Team were delivered as per instructions from the Waste Water Operations Supervisor

- SAFE 5 Risk Assessment Pocket Books, reviewed, amended and sent for printing
- Prepare for Safe Plan Internal Audit
- Advise and coach Managers and Supervisors regarding the upcoming Safe Plan Desk Audit
- Full review/audit conducted of evidence of Blue/White Card Licensing held by WWS staff and results forwarded to supervisors and managers to action
- Infection Control Risk Assessments conducted for areas of WWS

1.5 Systems and Processes

IT Projects

- Initial Data collection and cleansing for the Monitor Pro System is Progressing with the Business Trainee focusing on this project
- The RCR toll is being updated with rainfall and consumption figures.

1.6 Governance

- Performance & Operational Plans have been adopted by the Council for 2011/12.
- DERM has requested a meeting to discuss the DWQMP.
- SWIM is in the process of setting up the initial discussions for the annual reporting process.

1.7 Communication

The following key activities have occurred in relation to communication and promotion of the water business for the month.

- Directorate Promotion:
 - MRC website updated with the following information:
 - Water usage stats
 - Water interruption notices
 - Sarina Water Recycling Facility project information
 - Real time metering project information
 - The Eco Expo was held on 5 June to celebrate World Environment Day. The expo promoted many different sustainability initiatives. Water and Waste Services attended the expo promoting water saving and recycling along with running an interactive quiz. The expo was well attended with over 70 people participating in the quiz.
-

- **Communication Plans:**
 - Trade waste – follow up advertising campaign commenced on 16 January 2011 and will run through until 30 June 2011. The campaign consists of television and radio advertisements.
 - Inflow and infiltration – draft communication strategy has been prepared and is awaiting approval.
 - Remote network metering – a communication strategy has been prepared to communicate the real time metering program to the trial area in Slade Point. The strategy consists of a press release, letter, brochure and survey.
 - SWRF – a communication strategy has been prepared to promote the SWRF project to the Sarina community. The strategy consists of a press release issued on 24 June 2011 and published in the Sarina Advertiser, Sarina Business Focus email group and Council Connect, a mail out to be distributed to Sarina residents on 12 July 2011. Staff and the Water and Wastewater Portfolio Councilor will also be available at the Sarina office to answer questions on 21 July 2011, 28 July 2011 and 4 August 2011; this is being promoted through newspaper advertisements.

- **Education:**
 - The following Water Education Program sessions were held during April:

School	Visit Type	Sessions	Students
Farleigh State Primary School	Water audit at the school	1	12
Total		1	12

 - The Primary School National Water Week Poster Competition promotional material was prepared and distributed to all Primary Schools throughout the region.

- **Internal Communication:**
 - Submitted articles and water and recycling tips to Grapevine
 - Weekly Water Services update prepared on a weekly basis

1.8 Scientific and Analytical Services (SAS)

Monitoring Program

In June, SAS started the receiving environment monitoring for the current Sarina STP in Plane Creek. The program includes measuring the effluent plume in the creek, and sites upstream and downstream of the discharge point. The objective of the monitoring is to gauge the impacts of the current facility upon the environment. This will aid in the setting of water quality targets of the proposed Sarina Water Recycling Facility (SWRF).

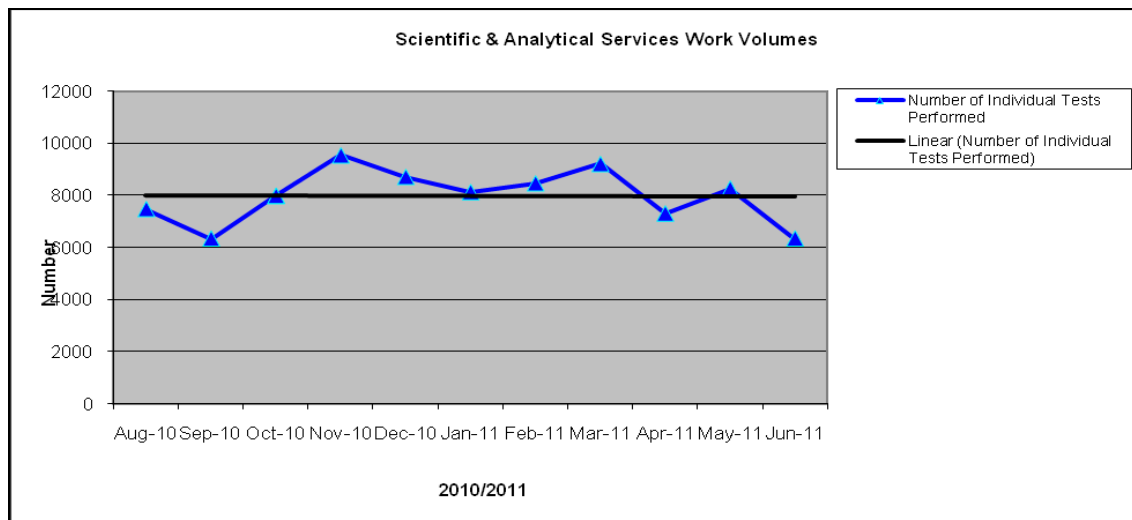
Laboratory Performance Statistics:

KPI	This Month	12 M-to-Date	Target
Registrations	165	2013	168
Samples	326	3933	328
Test Types	103	128	96
Individual Tests Performed	6333	89464	7455
Clients	26	38	29

Registration:

Customer	No.
Water & Sewerage	138
Waste	3
Other Council Departments	4
External Clients	20

The following graph details the number of tests performed by the laboratory over time:



NATA accreditation

The accreditation process for Biology is still ongoing. The Accreditation Board only sits every six weeks. It is expected that accreditation for Biology will be granted in July.

2 PLANNING AND SUSTAINABILITY

Activity No.	Project / Activity	Status	Critical Issues
1. Strategic Asset Management			
1.1	Capture of Asset data	As Constructed data for Marian & Mirani Sewers have been received allowing the start of data Capture. Data cleanup is in progress for North Mackay Water Network.	Mirani Cadastre is to be surveyed. Corporate GIS capture and Asset capture in progress.
1.2	Inflow and Infiltration Strategy for entire MRC Region	The I/I crews have been mobilised to Marian to progress smoke testing and leak detection. (Estimated progress 30% complete) An organisational review of program structure and efficiency has been initiated.	The progress of the smoke testing is reliant on ongoing fine weather. Full time availability of I&I team.
2. Strategic Infrastructure Planning			
2.1	Sewerage Strategy Report for Mackay City	Following an internal review, work is temporarily suspended in order to review planning population growth assumptions and fast track a separate initiative for the Marian/Mirani/Sarina PIP review. Council presentation date is to be reforecast. The finalised population growth assumptions are currently being disaggregated into the respective sewer catchments.	The accuracy of the master planning is highly reliant on accurate population assessments and forecasts and the accurate distribution of these growth forecasts into the sewerage catchments.
2.2	Regional Water Supply Report	Consultant has been appointed and work is underway. Draft report for Koumala has been completed and reviewed and will be used as the template for the remaining schemes.	Scope of works has increased markedly over that anticipated. Best estimate of completion is currently October/November 2011.

Activity No.	Project / Activity	Status	Critical Issues
2.3	Demand Management	A District Metered Area planning project has commenced. 34 concept DMA's have been identified. 7 have been selected for detailed design. Fittings and meters will be procured in July.	
2.4	Water Supply Planning Report for Mirani and Marian	A range of options are being investigated for reducing the capital cost for the future Mirani / Marian Water supplies.	Identification of a suitable off-take position and type.
2.5	Upgrade of Mirani WWTP	Design work has commenced.	
2.6	10 Year Capital Plan	Ongoing development of priorities based on growth and asset performance. Projects for next year are under assessment for works requirements and detailed briefs are being developed.	Balancing defined unexpected severe financial constraints with desired levels of service and increased risk. Complexity of modeling the plethora of permutations for forecasting long term impacts. The need for enhanced levels of monitoring of Asset condition and performance.

3. Detailed Infrastructure Planning

3.1	Implementation of planning activities associated with Year 1 Capital Plan	Consultants will assist in completing business cases. This is an ongoing process.	The funding uncertainty associated with the 20 Year Capital Plan and recently emergent priorities.
-----	---	---	--

Activity No.	Project / Activity	Status	Critical Issues
--------------	--------------------	--------	-----------------

4. Development Assessment

4.1	Development Approvals - Planning	Ongoing input into Development Approvals and operational works reports as required. Additional resource now appointed to assist in timely provision of advice.	Complications posed by possible new developments occurring outside of the PIA approval areas. Incorporation of revised Head Works charges based on the latest revised PIA's and associated trunk infrastructure.
4.2	Development Approvals - Compliance	Liaison with Engineering Services is ongoing to ensure consistent development approvals and acceptance of assets. Draft Service Level Agreement is in progress.	

5. Policy & Standards




5.1	Review of Water Services Engineering Guidelines, Planning Policies and Standard Drawings	Local resources engaged to update some standard plans. Standards & Specifications for proposed District Metered Areas are being developed and will be finalised in July. A Policy and Specification for Sub-Metering has been prepared.	
-----	--	---	--













3 INFRASTRUCTURE DELIVERY













Summary of Water Services Current Capital Program







The following table summarises key projects in the Water Infrastructure Delivery budget for 2010 / 2011.

Water Projects









Legend	
On track	
Of concern	
Not on track	

Project	Status	Budget	Time	Comments
Boundary Road (Bruce Highway – Rainlovers Street)	Construction			Contractor has re-established on site. Water and Sewer works scheduled to recommence 11/7/2011
Critical Issues	<ul style="list-style-type: none"> Under bore of Bruce Highway 			
WMR Connors Road, Paget	Construction			Process to manage interface with Ergon assets in place. Crew to return and lay remaining section of 300mm main on completion of Eimeo Road works.
Critical Issues	<ul style="list-style-type: none"> Existing services and interfaces with pipe route for safe access for construction and maintenance activities 			
Sarina WTP Chlorination Unit	Construction			Chlorine dosing units to be relocated.
Critical Issues	<ul style="list-style-type: none"> Installation of chlorine dosing unit 			
Nebo Road WTP Upgrade	Construction			Minor defects identified during plant performance proving being rectified. Internal road works and stormwater drainage substantially complete. Compilation of “As Constructed” information in progress. Contractor has commenced demobilisation. Landscaping works in progress.
Critical Issues	<ul style="list-style-type: none"> “As Constructed” plans, operation and maintenance manuals and asset data 			
Dumbleton Raw Water Trunk Main and Pump Station	Planning / Design			Interim Upgrade Implementation Plan complete and material procurement commenced. TOC Report amended to be presented in July to MIA ALG.
Critical Issues	<ul style="list-style-type: none"> Negotiations for Sunwater parcel of land ongoing. 			
Marian Augmentation	Procurement / Construction			Booster pump station and rising main construction works in progress. Internal network upgrade works substantially complete. Contract awarded for 150dia main

Project	Status	Budget	Time	Comments
				from Marcam to Staytes Road to Roebuck Civils. Fabrication of switchboard and booster pumpset in progress.
Critical Issues:	<ul style="list-style-type: none"> Booster pump control interface with switchboard resolved, some delay to switchboard manufacture. Physical impediment to proposed underbore at Daly Street/Anzac Avenue intersection, negotiating with QTMR for open cut trenching 			
Mirani Augmentation	Design			Civil/structural plan work complete, electrical documentation complete. MWS to review. Preparation of tender documentation commenced.
Critical Issues	<ul style="list-style-type: none"> Functional control specification to be reviewed 			
South Mackay Trunk Main	Construction			Work in progress, though high water table delaying under bores. Clash with Telstra on Cooks Lane being addressed. Ergon notification advising relocation works on Archibald and Crichtons Road rescheduled for October 2011 will delay project completion
Critical Issues	<ul style="list-style-type: none"> Wet ground conditions delaying thrust bores Telstra relocation required Ergon asset relocation rescheduled 			
Reservoir Chlorination System	Design			Ergon power supply required, network connection applications being prepared.
Critical Issues	<ul style="list-style-type: none"> Electrical supply to sites 			
Shakespeare Street	Procurement / Construction			Modification to 150mm dia main alignment due to clash with existing services required at Milton Street crossing. Night works in progress. 300mm dia main tender evaluation in progress with award programmed for July and commencing August.
Critical Issues	<ul style="list-style-type: none"> Interface with existing services at Milton Street impacting progress of 150mm main 300mm main tenders received and evaluation in progress. 			
Bruce Highway (Stockroute Road Intersection)	Procurement			QTMR project out to Tender. Delivery of Principal supplied RCP envelopers complete.
Critical Issues	<ul style="list-style-type: none"> Timing dependant on QTMR 			
Digitisation of Telemetry	Procurement / Construction			Internal review of Clear SCADA implementation proposals outstanding. Electrical Engineer from Nebo Road WTP project expected to join ID team mid July to assist with progress.
Critical Issues	<ul style="list-style-type: none"> Technical specification for the implementation of the Mirani telemetry network, including radio survey, to be tendered 			

Project	Status	Budget	Time	Comments
	<ul style="list-style-type: none"> Integrated of Mackay network onto ClearScada to provide capacity for development Electrical/control resources to assist with scoping and implementation works 			
Nebo Road Fluoridisation	Commissioned			Final subsidy claim discussed and due for submission in July.
Critical Issues	<ul style="list-style-type: none"> Finalisation of documentation for completion of project report. Costs to be finalised for submission of final subsidy claim. 			
Sarina Water Supply Main	Commissioned			Outstanding minor works being attended to and compilation of "As Constructed" information in progress.
Critical Issues	<ul style="list-style-type: none"> Finalisation of subsidy claim 			
Nebo Road Trunk Main Replacement	Design			MWS review of concept design and connections arrangements with existing network complete. Design work in progress
Critical Issues	<ul style="list-style-type: none"> 			

Waste Water Projects

Project	Status	Budget	Time	Comments
Sarina Water Recycling Facility	Development			MCU and Federal EPBC applications submitted and Acknowledgement Notices received. Project status briefing presented to Council. Preparation of TOR for engagement of SPS and rising main design consultant in progress. Land purchase settled. McCullough Robertson appointed to prepare Project Probity Plan, D&C Expression of Interest and Contract documentation
Critical Issues	<ul style="list-style-type: none"> Impact of QR expansion works Environmental assessments for development application 			
SPS – Base Hospital	Planning			Scope definition required
Critical Issues	<ul style="list-style-type: none"> Detailed planning brief and scope definition required to facilitate design Agreement with Qld Health on cost sharing arrangements 			
Sarina SPS 3,4,5,6 & 8	Completed			Fully operational
Critical Issues				
Pumping Stations – Beaconsfield, Coles Road, Gordon Street & Schmidtkes Road	Commissioned			Pump stations operational. Compilation of "As Constructed" plans in progress.
Critical Issues	<ul style="list-style-type: none"> "As Constructed" documentation outstanding 			

Project	Status	Budget	Time	Comments
Sarina #2 SPS	Procurement / Construction	●	●	Pre-lodgement meeting held with DERM to establish DA application format, application to be finalised and submitted by end of July. Pipe installation works in progress
Critical Issues	<ul style="list-style-type: none"> • Development of standard electrical specification with CTM Alliance partners in progress • DERM approval for pump station 			
SPS Switchboard Upgrades	Planning / Design	●	●	Standard electrical specification to be finalised for switchboards to be procured.
Critical Issues	<ul style="list-style-type: none"> • Standard Electrical Specification with CTM Alliance partners in progress • Electrical Engineer, Lee Taylor, to join ID team on completion of Nebo Road WTP upgrade and assist in finalising specification and assist with project delivery 			



Nebo Road WTP - New Switchroom & Chemical Dosing Building, roadways and storage shed



Nebo Road WTP - New Potassium Permanganate Tanks, Dosing Equipment installation nearing completion



Nebo Road WTP - New Sludge Dewatering Circuit operating in treatment process



South Mackay Trunk Main - Valve Pit under construction, one of many along the pipeline



South Mackay Trunk Main - Backfilling and road reinstatement after laying of pipe along Main Street Bakers Creek

4 OPERATIONS

4.1 Water Treatment System Performance

This report covers the month of June 2011. The major focus for water treatment still remains with the Nebo Road WTP. The construction projects have been completed and a list of potential process difficulties is being compiled to present to the MIA. The Commissioning and Process Proving Period has been completed for most of the major items of plant.

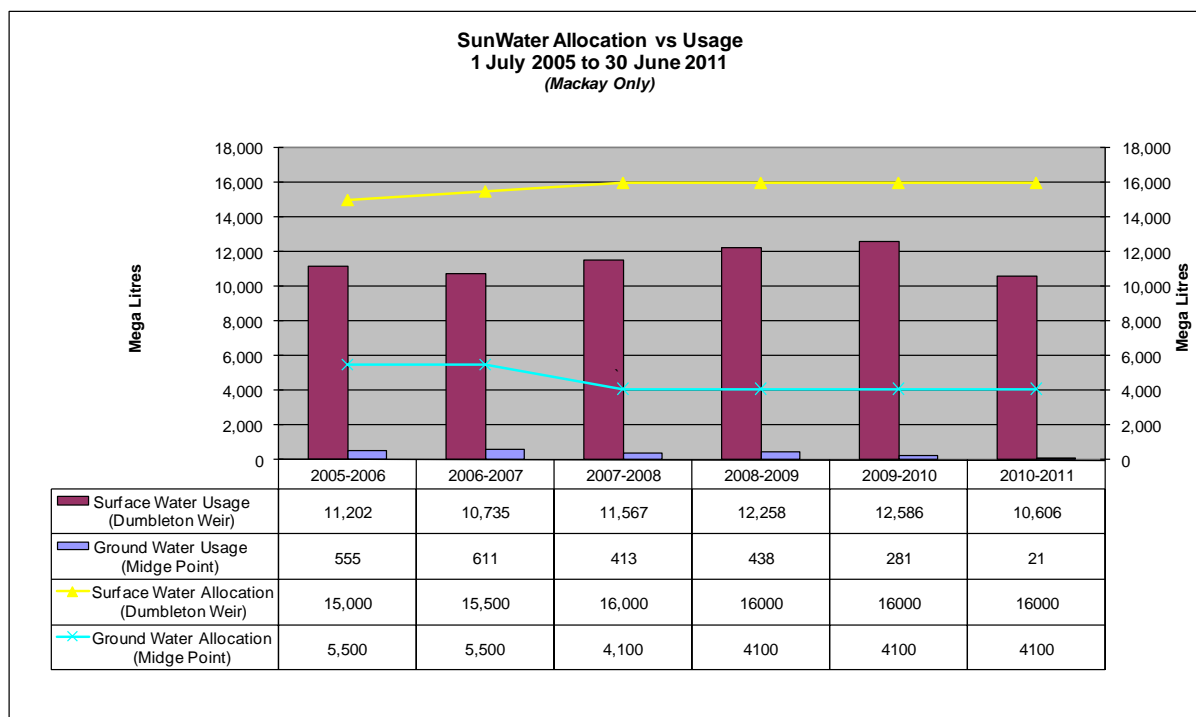
The Small Community Fluoride package plant at Marwood Bores Pump Station is still undergoing optimisation.

Dam levels in the region remain high as summarised below, with the wet season rain added to by intermittent rain events replenishing the Dumbleton and Mirani bulk water supplies.

Water Storage Levels

AS AT 30 JUNE 2011			
Weir / Dam	Current Volume (ML)	Capacity (ML)	%age
Mirani Weir	2930	4660	63
Marian Weir	3980	3980	100
Dumbleton Weir	6290	8840	71
Middle Creek Dam	1486	1486	100
Peter Faust Dam	491400	491400	100
Teemurra Dam	147500	147500	100

A summary of the water use against SunWater allocations is detailed in the graph below.



Mackay (Nebo Road) Water Supply Summary

Water consumption in June has remained constant with the average consumption being 30 ML/d. Annual consumption was forecast at around 13,000 ML, however actual consumption for the year was approximately 1,500 ML less than the original forecast due to excess wet weather. This is within the available SunWater allocation of 16,000 ML. Ground water (bore) usage was 0 ML.

Water Source Performance Summary

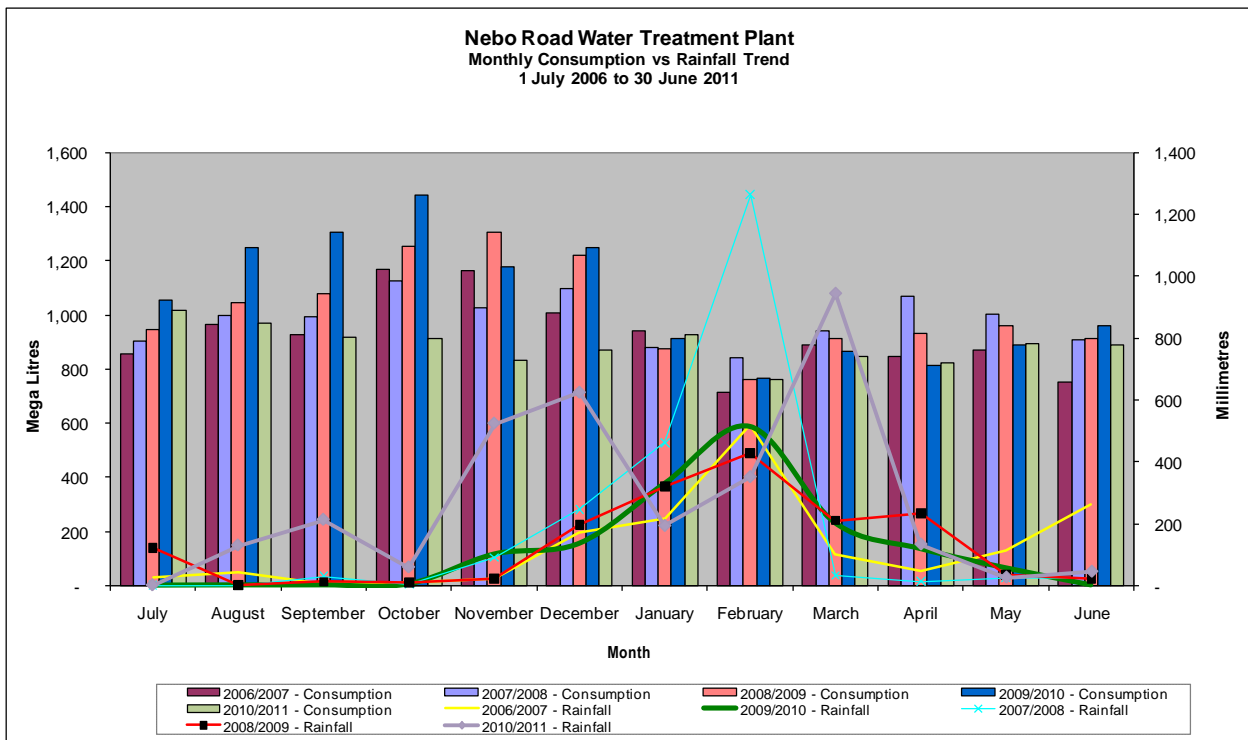
	Allocation (ML/year)	June Consumption (ML)	May Consumption (ML)	April Consumption (ML)	Year to Date Consumption (10/11) (ML)
Dumbleton Weir	16000	910	915	856	10919
Mackay Bores	5500	0	0	2	83

Water Consumption Performance Summary

	June	May	April
Monthly Water Consumption (ML)	889	894	823
Average Daily Water Consumption (ML)	30	29	27
Maximum Daily Water Consumption (ML)	36	35	31
Average Water Consumption *(Litres per Equivalent Person per Day)*	273	264	245
Rainfall (mm)	44	25	132

* Based on an estimated equivalent population of 110,000 Treatment Plant capacity to approximately 50 ML/day

Consumption trends for the last three months have remained relatively constant due to extreme rainfall events throughout November and through to March resulting in the daily average remaining relatively constant. Maximum day demands reached, 36 ML/d in June, 35 ML/d in May, and 31 ML/d in April.



Sarina and Beaches Water Supply Summary

A summary of the water supplied to Sarina and the surrounding communities is detailed below.

Water Source Performance Summary

	Allocation (ML/year)	Jun (10/11) Consumption (ML)	May (10/11) Consumption (ML)	April (10/11) Consumption (ML)	Year to Date Consumption (10/11) (ML)
Mt Blarney WTP (Plane Creek)	N/A	29.6	29.2	36.7	314.8
Sarina Bores	200	8.8	4.5	6.4	168.3
Marwood Bores	350	29.0	31.7	34.6	371.5
Bally Keel Bore	150	4.8	4.0	6.7	84.7
Armstrong Beach Bore		2.5	2.3	2.5	30.9

Water Consumption Performance Summary

	June	May	April
Monthly Water Consumption (ML)	74.7	71.7	86.9
Average Daily Water Consumption (ML)	2.5	2.3	2.9
Average Water Consumption *(Litres per Equivalent Person)	276	257	322
Rainfall (mm)	0	0	198

* Based on an estimated equivalent population of 9000

Pioneer Valley Water Supply Summary

Demand has increased marginally in all areas due to the dry weather.

Water Source Performance Summary

	Allocation (ML/year)	June (10/11) Consumption (ML)	May (10/11) Consumption (ML)	April (10/11) Consumption (ML)	Year to Date Consumption (10/11) (ML)
Mirani Bore	100	7.7	8.4	6.8	85.12
Marian Bore	95	16.9	18.5	16.3	194.28
Pinnacle / Gargett	60	1.4	3.1	1.3	21.68
Finch Hatton	46	2.6	2.8	2.3	28.64

Water Consumption Performance Summary

	June	May	April
Monthly Water Consumption (ML)	28.6	32.8	26.7
Average Daily Water Consumption (ML)	0.95	1.06	0.89
Average Water Consumption (Litres per Equivalent Person)	255	284	238
Rainfall (mm)	58.5	32	110

- Based on an estimated equivalent population of 3730EP

Remote Water Treatment Sites Performance

A summary of the water supplied to the remote sites is detailed below.

Water Source Performance Summary

	June (10/11) Consumption (ML)	May (10/11) Consumption (ML)	April (10/11) Consumption (ML)	Year to Date Consumption (10/11) (ML)
Eton	4.40	4.95	5.12	50.43
Calen	2.12	2.62	2.50	28.22
Bloomsbury	0.43	0.54	0.37	6.70
Midge Point	17.37	12.19	13.12	151.65
Koumala	0.87	0.89	1.19	13.13

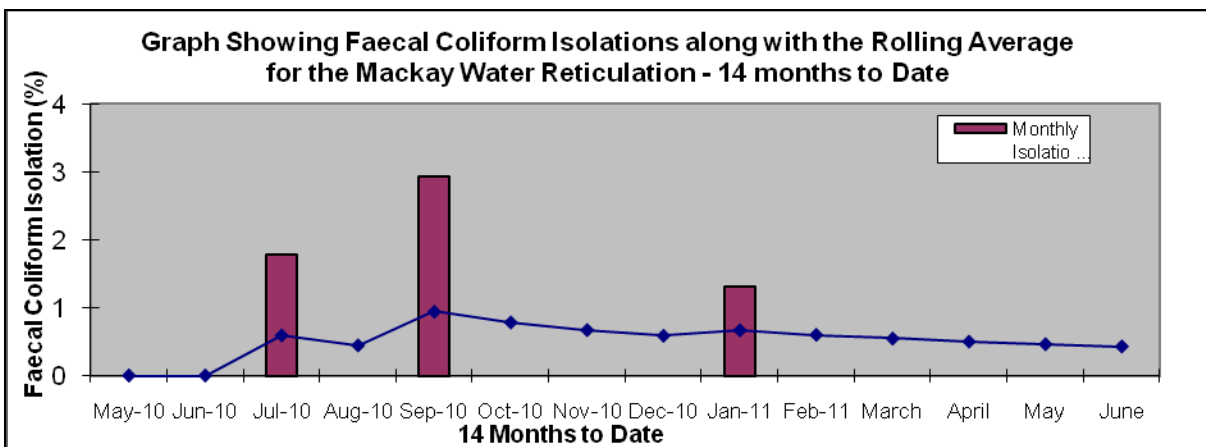
4.2 Water Quality

The following update of graphical data is for June and indicates that there were no exceedences or non-compliances for any analyte.

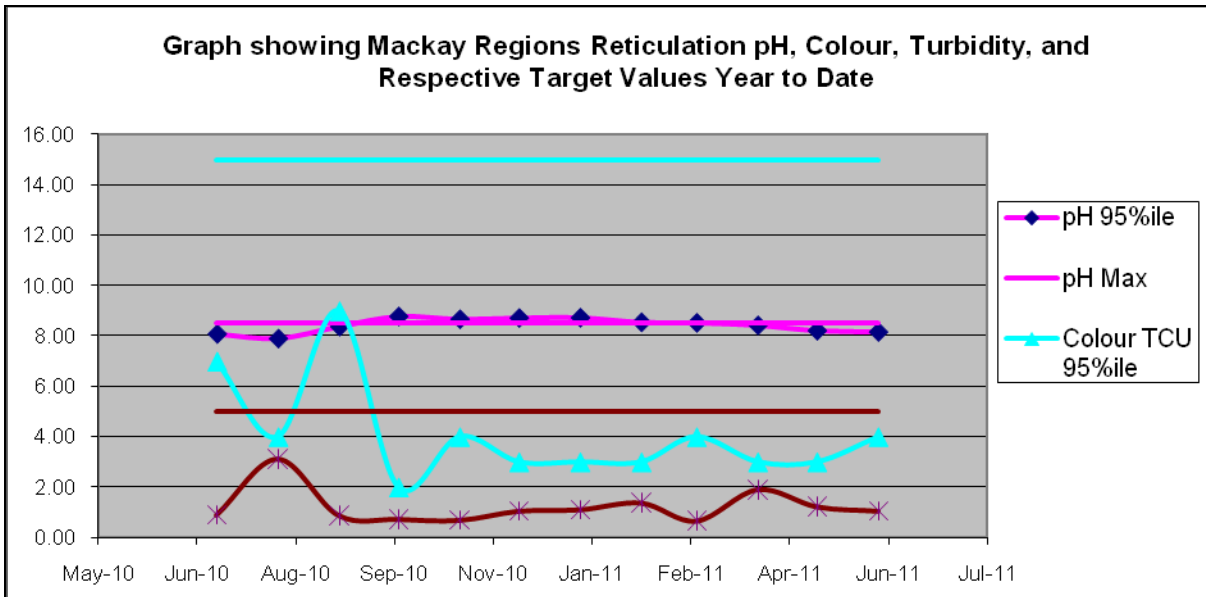
There was one faecal coliform isolation detected in the region to September 2010 and another in January 2011. This equates to a 14 month rolling average of 99.6% compliance which is higher than the customer service level target of 98%. A summary of the water quality performance data for the region is detailed in the following graphs.

An isolation has been recorded for Sarina and is a consequence of the reservoir roof leaking. The resultant infiltration into the reservoir after a dry period of weather provided a substantial source of contamination. The reservoir has been taken off line and repairs have been programmed.

Coliform Isolation Results

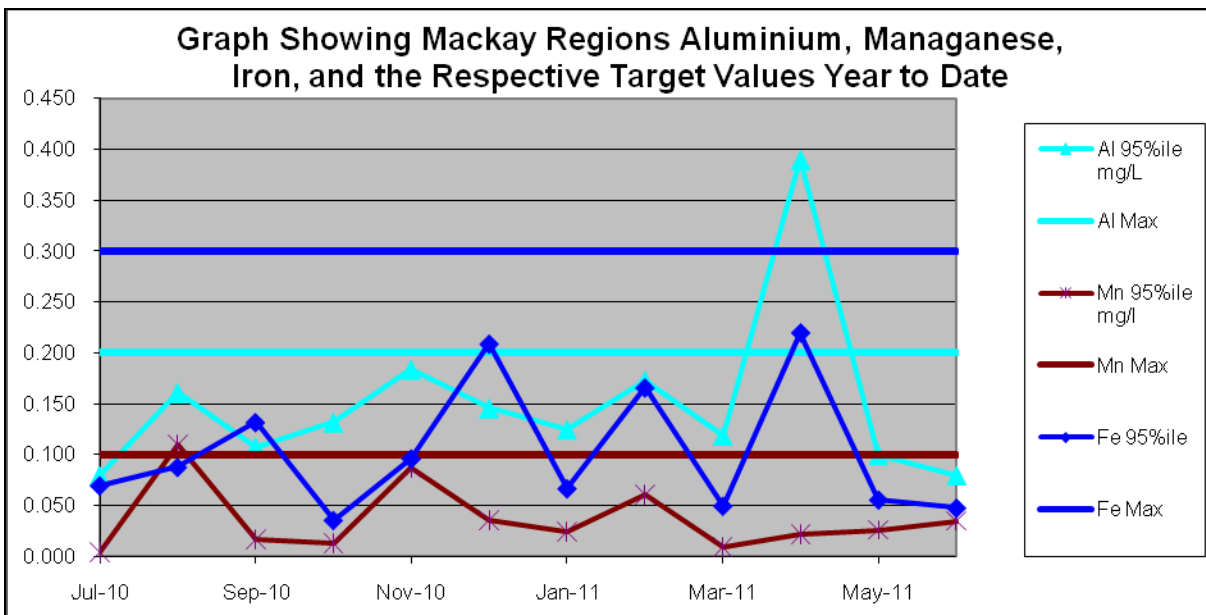


Reticulation pH, Colour, Turbidity



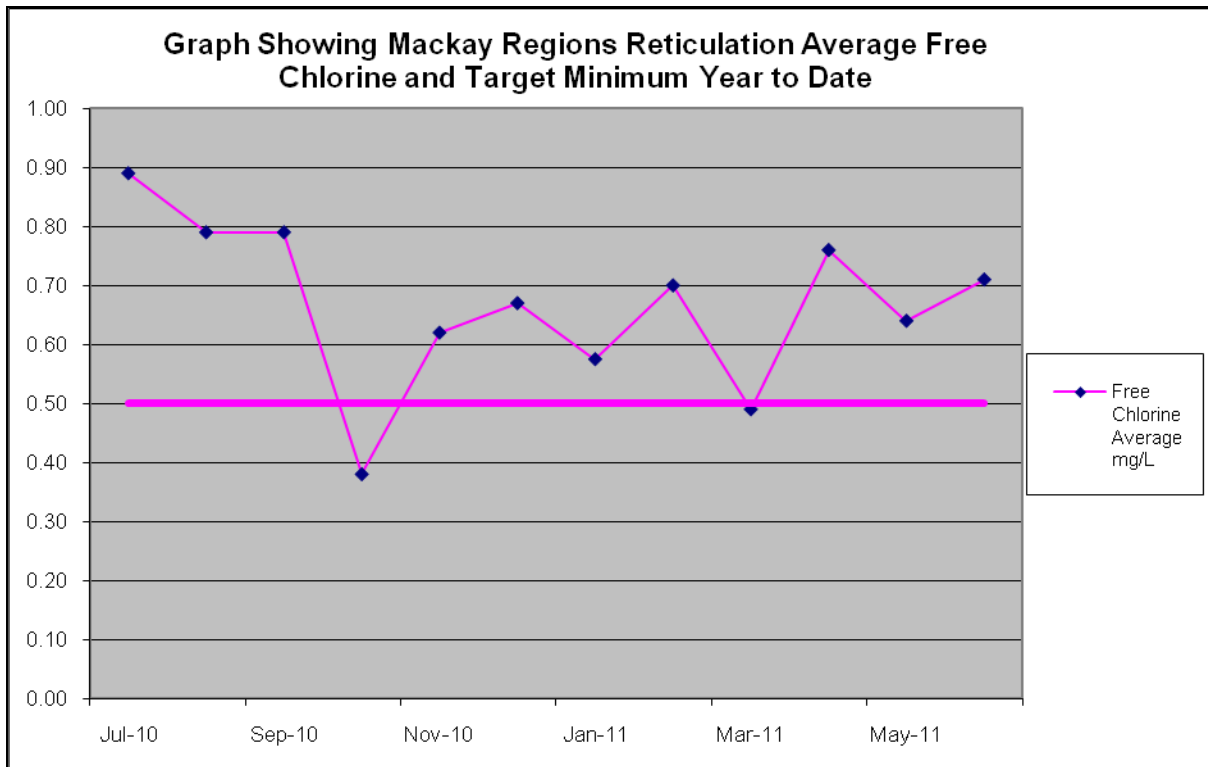
Note: Physical chemical parameters of Colour and Turbidity have not exceeded the guidelines in the Mackay distribution system for the period February 2010 to June 2011.

Aluminium, Manganese, Iron



Note: Physical chemical parameters have exceeded the aesthetic guideline for Aluminium in Sarina and Manganese in Bloomsbury. A new WTP has been procured for Bloomsbury. Installation of the new plant is complete and laboratory results indicate the Manganese issues have been addressed. The trial using Megapac flocculent has proved successful as an alternative to Aluminium Sulphate and will be the default flocculent at Sarina WTP.

Chlorine Residual Results



Note: With an average value of 0.71mg/l for June the Chlorine residual is compliant with the target value of 0.5mg/l.

4.3 Wastewater Treatment System Performance

The significant events for the wastewater system are as follows:

- Installation of flow meters at Mirani and Sarina WWTP's is complete and they have been commissioned.
- Installation of automatic samplers at Mirani and Sarina WWTP's is complete and they have been commissioned.

Mackay North Water Recycling Facility and Catchment

In May, the plant received a total of 98 ML of influent this month equating to an average flow of 3.17 ML/d. The maximum flow for the month was 3.53 ML. Total rainfall for the month was 38 mm.

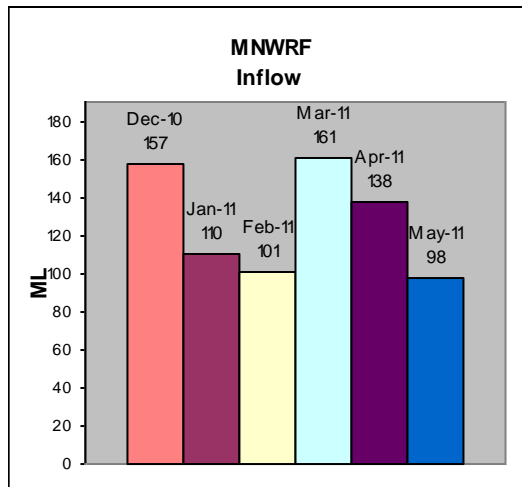
MNWRF Performance Summary

Date	WEEKLY (8TH DAY) LAB RESULTS							
	Licence Effluent pH (mg/l)	Licence Effluent DO (mg/l)	Licence Effluent BOD(mg/l)	Licence Effluent COD(mg/l)	Licence Effluent Suspended Solids(mg/l)	Licence Effluent TN(mg/l)	Licence Effluent TP(mg/l)	Licence Effluent Faecal Coliforms cfu/100 ml
Limits Licence	Range 6-8.5	Min 2 mg/L	Max 20mg/L	Refer BOD	Max 30mg/L	Max 15mg/L	Max 3mg/L	50%ile 150 90%ile 1000 Max 4000
3/05/2011	7.1	3.9	5	31	9	6	0.6	8
12/05/2011	7.4	5	5	25	6	3.4	0.4	10
20/05/2011	7	5.9	5	23	5	1.3	0.2	260
28/05/2011	7.1	6	5	20	15	3.2	0.1	1
Contract Limit						Average < 5 mg/L	Average < 1 mg/L	
Average of all results in the month						3.5	0.3	

Summary of Discharges from System

Parameter	May	April	March	Year to Date(10/11)
Total Wastewater Treated	98	138	161	1126
Effluent Released at Outfall (ML)	93	126	93	1060.7
Tonnes of Biosolids Removed From Site	82	111	127	1258
% Biosolids Beneficially Reused	100	100	100	100

A summary of the flows over the previous six months treated by MNWRF is shown below.



MSWRF Performance Summary

In May, the plant received a total of 666 ML of influent this month equating to an average flow of 21 ML/d. The maximum flow for the month was 24 ML. Effluent flow to reuse storages was 0 ML. Effluent flow to Bakers Creek was 623 ML. Total rainfall for the month was 27 mm.

Discharges to Storage Licence compliance

WEEKLY (8" DAY) LAB RESULTS									
Date	Effluent pH (mg/l)	Effluent BOD (mg/l)	Effluent COD(mg/l)	Effluent TSS (mg/l)	Effluent TN(mg/l)	Effluent TP(mg/l)	Effluent Faecal Coliforms	Turbidity	Disinfection Chlorination
Licence Limits	6.0 to 8.5	Max 20	Refer BOD	Max 30	50%ile 10 Max 30mg/L	50%ile 8 Max 15mg/L	50%ile 1000 Max 4000	Max 15mg/L	Min 1
3/05/2011	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek
12/05/2011	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek
20/05/2011	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek
28/05/2011	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek
Contract Limits	pH 6.0 to 8.5				Average <10mg/L	Average <8mg/L	50%ile <10cfu	95 th %ile <2 Max 5NTU	>1.0mg/L
Average of all results in the month	discharge to creek				discharge to creek	discharge to creek	discharge to creek	discharge to creek	discharge to creek

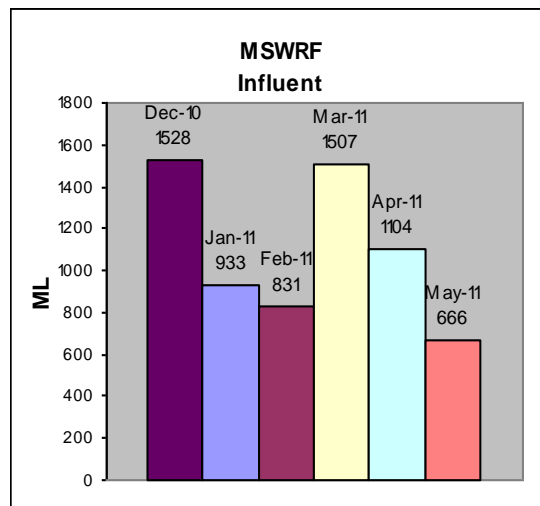
MSWRF Discharges to Bakers Creek Licence compliance

Date	Effluent pH (mg/l)	Effluent DO	Effluent BOD (mg/l)	Effluent TSS (mg/l)	Effluent TN(mg/l)	Effluent NH4	Effluent TP(mg/l)	Effluent Faecal Coliforms
Licence Limits	6.0 to 8.5	Min 2	Max 20	Max 30	Max 30mg/L	90th%ile 3 Max 6	Max 15mg/L	50th%ile 150 90th %ile 1000 Max 4000 (Up to 3 x ADWF)
3/05/2011	7.1	3.6	5	4	5	0.8	1.9	31
12/05/2011	6.9	4.4	5	4	5.2	1.5	1.4	1
20/05/2011	7	5.8	5	3	4.7	1	1.9	7
28/05/2011	7	7.1	5	17	2.9	0.9	1	840

Summary of Discharges from System

Parameter	May	April	March	Year to Date (10/11)
Total Wastewater Treated	666	1104	1507	9734.93
Effluent Released at Outfall (ML)	623	1067	1487	8908.39
Effluent Reused (ML)	0	0	0	702.13
% Effluent Reused (target 88%)	0	0	0	N/A
Effluent Storage (% remaining RWS2)	0	0	0	N/A
Effluent Storage (% remaining RWS3)	0	0	0	N/A
Tonnes of Biosolids Removed From Site	445	408	328	4247
% Biosolids Beneficially Reused	100	100	100	100

A summary of the flows over the previous six months treated by MSWRF is shown below.



Sarina Wastewater Treatment Plant

For June the plant received a total of 27.0 ML of influent this month equating to an average flow of 0.9 ML/d. The maximum flow for the month was 1.2 ML/d. Total rainfall for the month was 45 mm.

Sarina WWTP Performance Summary

For June the plant received a total of 27.0 ML of influent this month equating to an average flow of 0.9 ML/d. The maximum flow for the month was 1.2 ML/d. Total rainfall for the month was 45 mm.

MONTHLY LICENCE READINGS - SARINA					
Date	Effluent BOD(mg/l)	Effluent Suspended Solids (mg/l)	Effluent Faecal Coliforms cfu/100 ml	Effluent TN (mg/l)	Effluent TP (mg/l)
Limits	Max 30	Max 45	Max 4000	Max	Max 5mg/L
8-June-11	10	18	<1	17.7	6.8

Summary of Discharges from System

Parameter	June	May	April	Year to Date (10/11)
Total Wastewater Treated	27.0	32.8	75.9	737.36
Average Daily Flow	0.9	1.05	2.5	4.15
Effluent Released at Outfall (ML)	28.8	32.8	75.3	654.73
Effluent Reused (ML)	86.8	10.01	0	125.33
% Effluent Reused	100	0	0	16.1
Target / Licensed Effluent to be Reused (%)	N/A	N/A	N/A	N/A
Effluent in Storage (%)	100	100	100	N/A
Tonnes of Biosolids Removed From Site (m3)	0	0	0	64
% Biosolids Beneficially Reused	N/A	N/A	N/A	N/A

Mirani/Marian Wastewater Treatment Plant

For June the plant received a total of 19.2 ML of influent this month equating to an average flow of 0.64 ML/d. The maximum flow for the month was 0.75 ML/d. Total rainfall for the month was 58.5 mm.

Mirani WWTP Performance Summary

MONTHLY LICENCE READINGS - MIRANI								
Date	Effluent pH (mg/l)	Effluent DO (mg/l)	Effluent BOD(mg/l)	Effluent Suspended Solids (mg/l)	Effluent TN (mg/l)	Effluent TP (mg/l)	Effluent Faecal Coliforms cfu/100 ml	Ammonia
Limits to water storage	6.5-8.5	N/A	Max 20mg/L	Max 30mg/L	N/A	N/A	Max 4000	N/A
Limits to water way	6.5-8.5	Min 2 mg/L	Max 15mg/L	Max 20mg/L	Max 20mg/L	Max 5mg/L	Max 600	Max 2
	7.5	N/A	<5	5	N/A	N/A	<1	N/A

Mirani discharged all effluent to the recycled water storage under normal weather conditions. The local cane farmers have not used any effluent from the reuse storage dam for irrigation.

The Pioneer Valley Golf Club used 16.5 ML of effluent from the storage dam in June.

Whilst discharging to the reuse storage dam the licence limits are DO – 2.0 mg/L, BOD - 20 mg/L, Suspended Solids - 30 mg/L, and E-Coli - 4000 cfu/100ml.

Summary of Discharges from System

Parameter	June	May	April	Year to Date (10/11)
Total Wastewater Treated	19.2	20.3	36.4	304.12
Average Daily Flow	0.64	0.66	0.79	0.83
Effluent Released at Outfall (ML)	0	0	8.3	92.5
Effluent Reused (ML)	19.0	20.0	14.3	147.23
% Effluent Reused	87		39.2	70.9
Target / Licensed Effluent to be Reused (%)	100	100	100	100
Effluent in Storage (%)	69	73	60	N/A
Tonnes of Biosolids Removed From Site (m3)	0	0	0	129.4
% Biosolids Beneficially Reused	0	0	0	100

Effluent Recycling

Recycled Water usage in June was again 0 ML with no recycled water usage at all. Demand has remained suppressed for all of the MWRP area.

As suggested within previous reports, any significant rainfall events would hinder recycled water usage. Not only has there been substantial rainfall, in addition weather conditions have been cool.

We do not expect much use of the recycled water until the weather conditions return to a dry regime.

Storage levels are as follows:

RWS 2----- 100 %

RWS 3----- 100 %

Farm Balance Ponds are generally very close to full supply level.

4.4 **Network Reticulation Systems**

4.4.1 Civil Water Maintenance

- Install a 300mm poly water main in enveloper pipe across Hay Point Road, as part of upgrades work for the Hay Point Coal Terminal Expansion
 - Undertake three (3) repairs on the Dumbleton Raw Water Rising Main
 - Investigations and maintenance work were carried out on the suspended water main under the O'Connell River Bridge as part of Council's planned maintenance work.
 - Investigations and maintenance work were carried out on the suspended water main under the Bakers Creek bridge as part of Council's planned maintenance work
 - Investigations and maintenance work were carried out on the suspended water main under the Ron Camm Bridge as part of Council's planned maintenance work - maintenance works on this bridge are scheduled for July
 - Investigations and locations were undertaken in Bedford Road, Evans Street and Horse & Jockey Road at the Peak Downs Highway to enable contractors to finalise designs for upcoming works
 - Five (5) cut-ins to the existing network have been carried out in Dutton Street, Harvey's Road and Milton Street to allow new sub-divisions to be connected in the system.
 - Flow and Pressure tests have been carried out in ten (10) locations to assist developers with designs and also to allow Water Services Planning team to check the calibration on their model. Carlyle Street Mackay, Dawson Boulevard Rural View, Ahern Court Rural View, Morehead Drive Rural View, Herbert Way Rural View, Douglas Crescent Rural View x 5
 - Investigations were undertaken into a damaged effluent line from Borthwicks Meatworks to the Turf Farm which revealed the damage was caused by Works Department slasher. Works were notified to undertake repairs with Borthwicks
 - All manholes were located and marked clearly in Canter Lane, Bucasia in an effort to stop damage being caused by Council slashers
 - All hydrant and valve positions on Mt Bassett Drive and Eimeo Road have been located and identified with marker posts as part of Councils ongoing Plant Maintenance Program
-

- Trees and undergrowth have been cut and poisoned on a water easement between Ridgewood Drive and Powell's Road, Farleigh after investigations revealed the easement was not manageable
 - A 100mm fire line has been blanked off and removed in Farrelly's Lane, Paget after it was no longer required on the building
 - Seven (7) hydrants were repaired or replaced at Golf Course, Mirani, Anzac Parade, Marian x 2, Barrier Street Eton, East Gordon Street East Mackay, Banksia Avenue Andergrove, Hilda Court North Mackay as part of Council's ongoing Plant Maintenance Program
 - Three (3) valves were repaired or replaced at Black Street Mackay, Kelsey Creek Pump Station Proserpine and Keim Street Rural View as part of Council's ongoing Plant Maintenance Program
 - Four (4) services were renewed in Sarina as part of Council's ongoing Plant Maintenance Program
 - Installation of larger water services and firelines/metchecks were installed at:
 - 6-8 Evolution Drive, Paget – 40mm water meter and install fire hydrant on footpath
 - 362 Slade Point Road, Slade Point – 100mm metcheck
 - 9-13 Turbo Drive, Paget – 32mm water meter – 100mm metcheck
 - Carl Street, Rural View – 50mm water meter – 100mm metcheck
 - General Building maintenance undertaken for internal departments:
 - Other Work:
 - Faulty/Damaged water meters were repaired this month
 - Nine (9) water services were replaced - 7 Peel Street Mackay, Vella's Food Market, 99 Boundary Road Ooralea, 16 Cannan Street South Mackay, 19 Roberts Avenue North Mackay, 95 Investigator Street Andergrove, Manzelmann Street Andergrove, 3-5 Oak Street Andergrove, 92 Cape Hillsborough Road Seaforth
 - Installation of 2nd water meter/poly to boundary on blocks (owner splitting block) has been carried out in three (3) locations – Lot 12 Miclere-Farleigh Road, 36 Schooner Shoal Point and 6 Galleon Circuit, Shoal Point
 - Disconnections were carried in two (2) locations – Showgrounds Park 50mm and Cinnamon Drive, Glenella.
 - Sewer main repairs have been carried out at 8 Chivers Street, Marian
-

- Stolen water meters were replaced at Poulsen Drive Marian and Steve Street, Greenmount
- New shower rose and strainers for bathrooms, kitchen and toilet cistern have been installed at Investigator Street Andergrove private residence due to dirt and small rocks
- Dirty water has been flushed at Midge Point

4.4.2 Civil Sewer Maintenance – Recoverable Works

- Six (6) HCP has been connected as part of new development works
- Four (4) new manhole bases have been constructed to allow subdivisions to be connected into the existing networks
- Nineteen (19) new HCP's have been connected as part of small lot re-configurations
- Two (2) manholes have been raised to allow private property owners to adjust the levels in their properties
- One (1) sewer rising main has been re-located to allow for stormwater installations in the new development

4.4.3 Standard Maintenance

- Ten (10) manholes have been repaired after planned maintenance inspections revealed inflow problems
 - Two (2) pump station overflows have been repaired after damage was identified during recent rain fall events
 - Ten (10) sewer lines have been cleaned as part of planned maintenance to allow for camera works on the network
 - Four (4) HCP slumps have been back filled after rain fall events created settling
 - Inspection and planning works have been undertaken to allow for overflow installation in the networks in an effort to minimise private property flooding. Installation works are expected to start in July/August
-

4.4.4 CCTV Investigations

CCTV Monthly Report - June 2011

New Developments:

6 - 8 Steve Street, Greenmount	18m
247 Bedford Road, Andergrove	45m

Building Over Sewers:

11 Eva Parade, Glenella	44m
5 Linda Street, Bucasia	51m
9 Benson Street, Mt Pleasant	71m

General Mains Investigations:

Elizabeth Drive, Bucasia	56m
Spannagle Street, Bucasia - Subsidence	126m
George Street, South Mackay - Subsidence	110m
Symons Street, South Mackay - Subsidence	85m

Jump Up Locations:

Kenzey Street, North Mackay	61m
-----------------------------	-----

Works Department:

Stormwater Layout Surveys

Casuarina Street, Slade Point	112m
Fisher Street, Shoal Point	180m
Napier Street, South Mackay	150m
Macalister Street, CBD - Odour	87m

Private Works:

Bold Street, Walkerston - Stormwater	11m
--------------------------------------	-----

During the month of June, audits were carried out on first receiving sewer manholes in the Shoal Point, Bucasia and Eimeo catchments. These audit reports are currently with Troy Madden.

4.4.5 I/I Investigations

- Smoke testing has been carried out in Tolchers Lane, Nicolai Street, Poulsen Drive, Duell Court, Sheedy Crescent, Daly Street and Reg Smith Street in Marian as part of the inspection program in that area of the network
-

4.5 Trade Waste

4.5.1 Main Focus

Trade waste inspectors attended training conducted in Proserpine on 9 June 2011 by Building Codes Queensland. The training covered:

- how to conduct an investigation
- how to issue fines and what systems to establish when issuing fines
- how to conduct random licence checks.

4.5.2 Trade Waste Statistics

JUNE 2011	Bakers Creek WWTP	Bucasia WWTP	Sarina WWTP	Mirani WWTP
Total approvals issued @ 30 June 2011	423	35	3	1
Businesses approved @ 30 June 2011	354	25	2	1
• Category 1	109	7	1	0
• Category 2	89	5	0	0
• Category 3	164	13	1	1
Applications under assessment @ 30 June 2011	11	0	0	0
Temporary approvals				
Temporary approvals issued for June 2011	15	0	1	0
Temporary approvals awaiting formal approval @ 30 June 2011	59	0	1	0
Total non-generator assessments	490	1	0	2
Non-generator assessment for June 2011	42	0	0	0
Total approvals issued				
Approvals issued for June 2011	10	0	0	0
• Category 1	2	0	0	0
• Category 2	4	0	0	0
• Category 3	4	0	0	0
Compliance tests performed during June 2011	52	2	0	0
• Within set limits	22	0	0	0
• Exceeding set limits	8	0	0	0
Outstanding test results @ 30 June 2011	24	2	0	0
Compliance test results outstanding from May 2011	13	3	0	0
• Within set limits	4	3	0	0
• Exceeding set limits	9	0	0	0

4.6 Plumbing

4.6.1 Main Focus

The new plumbing inspector commenced employment in early June.

All plumbing inspectors attended the following training during June:

- 9 June 2011 - Training in Proserpine conducted by Building Codes Queensland – how to conduct an investigation; how to issue fines and what systems to establish when issuing fines; how to conduct random licence checks.
 - 14 June 2011 - Installation requirements, etc. for Action Tanks.
-

- 28 June 2011 - Presentation by Plastek for range of fittings including expansion and knuckle joints.

4.6.2 Plumbing Inspections

Inspection type	June 2011
Booked inspections	475
Additional inspections	3
Urgent inspections (Form 3)	11
Total	489

Of the 475 inspections carried out in June, 3 inspections were booked directly through plumbing inspectors and 11 were booked as Form-3 inspections.

4.6.3 Plumbing Applications

Location	June 2011 Received	June 2011 Decided	Information Requests Issued	Average days to decide	June 2010 Received
Central	125	81	30	5	116
West	17	18	4	6	39
South	17	15	7	6	20
Total	159	114	41	6	175

The total number of information requests issued during June 2011 was 41. Provision of insufficient plans remains a factor in the number of information requests issued.

5 WASTE SERVICES

5.1 Management

- An improved weighing system was implemented mid June at Paget Transfer Station. All vehicles are now being weighed in and out. This will ensure that Council is compliant with proposed introduction of the State Government's Legislation on waste.
 - A Personal Digital Assistant (PDA) trial commenced mid-June at Otterburn waste facility. The PDA is a handheld electronic device used for ticketing purposes. The trial is partially funded by DERM. The introduction of an electronic system will reduce paperwork, centralise data to ensure compliance with the State government's proposed Legislation and reduce financial risks. If successful the system may be rolled out to other Local governments.
-

- Landfill Gas monitoring continued at Bayersville, Otterburn, Hay Point, Sarina and Hogan's Pocket Landfill.
- Cell 2 construction works continued at Hogan's Pocket Landfill.

Active Waste Disposal Sites

Active Waste Disposal Sites:	June			May		
	Inspections	Actions required	Actions completed	Inspections	Actions required	Actions completed
Hogans Pocket L/F	16	0	0	16	2	2
Paget T/S	19	0	0	22	2	2
Bloomsbury T/S	3	0	0	1	0	0
Kolijo T/S	3	0	0	1	0	0
Kuttabal I/B	6	3	2	3	2	0
Seaforth T/S	2	2	2	3	1	1
Sarina L/F	17	0	0	24	5	5
Hay Point L/F	8	0	0	11	2	2
Koumala T/S	8	0	0	5	2	2
Otterburn L/F	13	1	1	7	1	1
Gargett L/F	11	1	1	7	2	2
Finch Hatton T/S	5	0	0	4	1	1
Eungella T/S	4	0	0	5	0	0

Greenwaste Sites

Greenwaste Sites:	June			May		
	Inspections	Actions required	Actions Completed	Inspections	Actions required	Actions completed
Bayersville	7	3	0	4	1	1
Walkerston	1	0	0	2	2	1
Bucasia	5	1	1	2	0	0

Closed Waste Sites

Closed Waste Sites:	June			May		
	Inspections	Actions Required	Actions Completed	Inspections	Actions required	Actions completed
Illawong (Far Beach)	2	1	1	8	2	2
St Helens	1	0	0	1	0	0
Midge Point	1	0	0	1	0	0
Colston Park	0	0	0	0	0	0
Seaforth L/F	1	1	1	3	1	1
Koumala	2	1	0	4	1	0

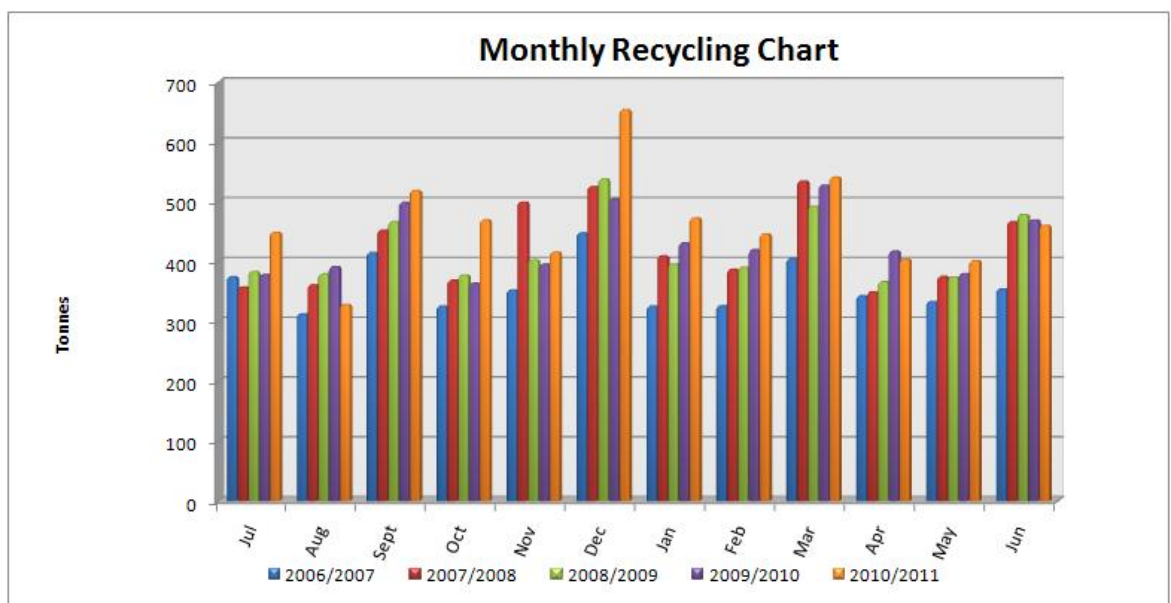
Waste Site Transactions (Receipts Issued)

Transaction (Receipts)	Jun-11	May-11	Apr-11	Mar-11	Feb-11	Jan-11	Dec-10	Nov-10	Oct-10	Sep-10	Aug-10	Jul-10	Jun-10
Hogans Pocket L/F	27	46	53	65	58	47	59	53	51	43	13	9	3
Paget T/S	7,992	8,853	9,919	8,346	9,784	12,898	11,580	8,691	9,989	8,365	8,813	8,635	8,468
Bloomsbury T/S	93	116	118	88	118	172	150	85	135	112	116	117	97
Kolijo T/S	83	113	143	96	152	125	120	130	149	135	137	118	127
Kuttabal I/B	113	106	133	102	150	164	154	119	118	123	147	128	153
Seaforth T/S	189	208	267	185	231	376	216	216	264	229	256	239	211
Sarina L/F	639	766	941	635	965	1,344	720	703	910	740	769	462	362
Hay Point L/F	213	226	290	270	288	407	271	229	298	222	244	283	238
Koumala T/S	24	13	12	15	14	24	23	20	19	36	24	18	22
Otterburn L/F	306	405	474	295	401	729	470	361	499	366	375	350	338
Gargett L/F	64	88	87	71	95	138	90	77	101	97	102	88	92
Finch Hatton T/S	75	76	80	60	85	117	62	63	90	67	44	68	52
Eungella T/S	54	33	38	36	50	58	43	33	53	34	42	56	36
Bayersville Greenwaste Facility	407	606	1,104	779	1,055	1,408	576	726	1,032	559	540	595	549
Walkerston Greenwaste Facility	100	180	262	169	244	286	138	148	254	124	123	151	126
Bucasia Greenwaste Facility	331	442	670	487	637	906	360	523	775	413	390	501	398

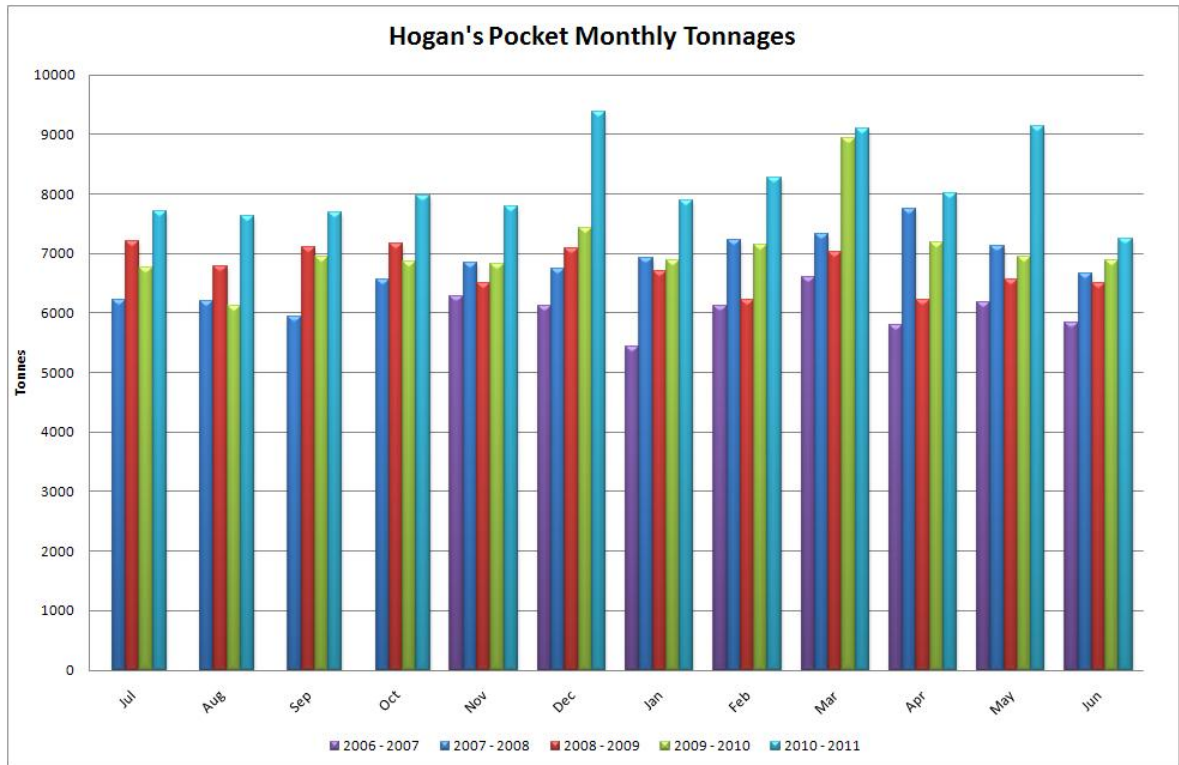
Collection Services

Collection Services:	Jun-11	May-11	Apr-11	Mar-11	Feb-11	Jan-11	Dec-10	Nov-10	Oct-10	Sep-11	Aug-10	Jul-10	Jun-10
No of new waste bin services provided	85	65	77	96	58	60	85	104	93	120	20	96	104
No of waste bin replacements - damaged	72	83	62	74	90	93	67	59	81	74	76	65	108
No of waste bin replacements - stolen	28	0	24	39	41	32	31	49	35	36	34	34	40
No of waste bin repairs	70	91	57	76	72	77	57	69	72	66	57	87	70
No of New recycling bins services	85	65	77	1	0	9	0	1	10	8	0	0	2
No of recycling - replacements - damaged	6	13	11	4	22	4	4	5	4	5	4	16	2
No of recycling - replacements - stolen	9	0	14	20	14	13	10	23	14	4	23	19	11
No of recycling bins - repairs	19	10	10	18	7	16	26	14	6	9	16	14	9

Recycling Collection



Waste Disposal Monthly



Environmental Education Performance Report June 2011

Main Focus Of Work Activities:

Environmental Education Duties:

Education Visits To The Materials Recovery Facility:

Co-coordinated and performed the following school and community visits at the Materials Recovery Facility:

- Pioneer High School Year 11 students -17 Year 11 students and 1 teacher.
- Library Services Volunteers - 22 adults and 4 Mackay Regional Council staff.
- Birralee Childcare Centre - 26 children and 12 adults.
- Central Queensland University - 16 students and 2 adults

EcoExpo

- Attended the EcoExpo coordinated by the Mackay Conservation Group on 5 June.
 - Participated in a joint Mackay Regional Council display and contributed waste education section for a sustainability message.
-

2011 Recycling Art Competition

- The 2011 Recycling Art Competition for schools closed on Friday, 10 June.
- Entries were displayed at the Mackay Regional Show and judged by Cr Greg Thomsen, Cr Di Hatfield and Cr Ross Walker.
- Winners of the competition were notified by phone and via a news article in the Daily Mercury.

Promotions

- Liaised with Corporate Communications to produce a press release and photo regarding the winners of the Recycling Art Competition. Stories appeared on Channel 7 Local News and in the Daily Mercury and Midweek newspapers.

Conference / Meetings

- Attended an EcoExpo planning meeting on 3 June.
- Attended a Recycling Bin Inspection Program meeting with Veolia on 3 June.
- Attended Waste Services staff meeting on 9 June.

Reef Guardian Council Action Plan

- Provide ongoing liaison with all stakeholders of the Reef Guardian Council Action Plan for the Mackay Regional Council.
- Continuous improvement and updating of the action plan.

Training

- Completed required Take 5s for the month.

Website

- Liaised with Kylee Gilbank to update website information.

Recycling Bin Inspection Program 9 May to 10 June

Background

The Recycling Bin Inspection Program is aimed at improving recycling rates in the Mackay region and reducing the amount of contamination that arrives at the Materials Recovery Facility. The program provides Council with an opportunity to educate members of the public who may be having difficulties with recycling.

Quotes were sought from local security firms for temporary employment of a contract Bin Inspection Officer for a six (6) week period.

Pyramid Security successfully obtained the contract from 9 May 2011 to 17 June 2011. Prior to commencing the work, the contractor was briefed about the Program and given the materials for carrying out the work.

Bin Collection Contractors, JJ Richards and Veolia, assisted with selecting areas for inspection. This was to ensure the contractor could comfortably perform inspections without the threat of trucks overtaking and collecting bins in his path.

Inspection Procedures

Bins are inspected for a period of 4 hours each morning from Monday to Friday. All bins inspected are recorded on a running sheet. The type of contaminant found in bins is noted against the address.

Two levels of contamination are recorded; major contamination and minor contamination. If there is major contamination in the yellow-lidded recycling bin, a sticker with a red cross is placed on the bin and the bin is removed from collection on that day. A photograph is taken of the contaminants in the bin and a letterbox drop is made to notify the resident of the contaminants. Bins with minor contaminations are left kerbside for collection. A letterbox drop is made to notify the resident of the minor contaminants.

When the contractor has finished inspections each day, inspection sheets are submitted to Waste Services for action. Results of inspections are entered onto a database.

A letter is sent to the resident requesting they remove the contaminants from the bin. If discrepancies occur or time permits, residents are visited to resolve any issues.

Customer Service, Waste Services staff, JJ Richards and Veolia are notified of any bins that are removed from collection due to major contamination.

A letter is sent out to the resident informing them that because of the contamination, the recycling bin will not be serviced until the next recycle collection day. The resident is informed that it is essential they remove any contaminants in the bin before this scheduled pickup.

Results Of Six Weeks Of Inspections: Collection Week 2

Day	Date	Suburb	Number inspected	Major contamination (X Sticker)	Minor contamination (Letterbox drop)
Monday	09 May	Eton/ Walkerston	100	10	10
	23 May	Eton/ Walkerston	10	4	1
	6 June	Sarina /Armstrong B.	117	10	16
Tuesday	10 May	East Mackay	214	8	44
	24 May	East Mackay	225	14	29
	7 June	Hay Pt/ Salonika B.	181	16	21

Wednesday	11 May	Richmond/Habana	107	5	15
	25 May	Sarina Beach	39	4	1
	8 June	South Mackay	150	9	18
Thursday	12 May	Ooralea	253	7	26
	26 May	Ooralea	323	12	19
	9 June	West Mackay	300	13	25
Friday	13 May	Glenella	178	8	17
	27 May	Glenella	259	14	28
	10 June	Sarina/Nth Mackay	175	9	15
Totals			2631	143	285

Results Of Six Weeks Of Inspections: Collection Week 1

Day	Date	Suburb	Number inspected	Major contamination (X Sticker)	Minor contamination (Letterbox drop)
Monday	May 16	North Mackay	78	1	6
	May 30	North Mackay	231	13	14
	June 13	Sarina	175	12	22
Tuesday	May 17	Bucasia	261	17	24
	May 31	Bucasia	270	16	23
	June 14	Shoal Point	298	15	32
Wednesday	May 18	South Mackay	275	13	21
	June 1	South Mackay	207	20	16
	June 15	North Mackay	226	23	22
Thursday	May 19	Beaconsfield	275	23	24
	June 2	Beaconsfield	271	16	25
	June 16	Andergrove	268	20	20
Friday	May 20	West Mackay	175	7	18
	June 3	West Mackay	107	10	8
	28/05/10	Glenella	100	11	19
Totals			3217	217	298

Note:

Some residents removed contaminants on the spot and presented their uncontaminated bin for collection.

Difficulties Experienced With Bin Inspection Program:

- Some residents are aware that if they remove the sticker and present the contaminated bin it will be collected.

- The program creates a large amount of work with administration requirements, customer enquiry requests and the need to visit residents. Often the work generated by the bin inspection program is unable to be consistently addressed, due to lack of available time by staff to do follow-up work. Often other work priorities take precedence over the work generated by this Program. The Recycling Bin Inspection Program alone produces enough work to gainfully employ one person full time. At present, staffing levels do not allow for this to happen.

Summary Of Inspection Results And Points For Consideration:

- In total, 5,848 recycling bins were inspected over the six (6) week period. 360 of the bins had major contamination and 583 had minor contaminations.
- Interestingly, the overall rate of contamination during the six (6) week period reached 16% with 6 % of bins inspected containing high levels of contamination and 10% of the bins inspected containing minor contamination.
- An assumption can be made that the overall contamination is higher than 16% as only recyclable material that is visible on the surface on the bin can be inspected. The entire contents of the bin cannot be inspected.
- The Bin Inspection Program is very beneficial in identifying properties that present more than one bin for collection and has assisted with other programs to check and alter this exploitation.
- The Bin Inspection Program provides face to face contact with resident's who seek to clarify the requirements with recycling.
- Photos of major contaminants are available for viewing at Q:\Water and Waste Services\Waste Services\Bin Inspection program photos May-June 2011

Suggestions For Future Programs:

In consultation with the contract Bin Inspection Officer the following suggestions were made to continually improve the Recycling Bin Inspection Program:

- Difficulties exist in rural areas identifying aligning the recycling bins with properties. An easy solution to this would be the introduction of a numbering system for bins. The complexity would be implementing the numbering system.
 - Operationally, running the Bin Inspection Program in summer months provides greater day light hours for achieving a larger amount of inspections as the contractor can start at 5am well ahead of the collectors who start at 6am.
-