



WWS Performance Management Report

July 2011



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OVERVIEW

The SafePlan Rollout was expanded to all Water and Waste Programs in June. Water and Waste continues to improve its compliance with the SafePlan monthly action plans. There was 0 lost time injury's for the month and 6 safety incidents.

Water Services continues to face high levels of staff turnover. Several staff finished in the operations program during the month. Requisition for the Manager of Operations continues with face to face interviews scheduled for the first week in August. Some vacancies were filled during July including a labouring, 1 engineer, 1 environmental officer and a laboratory technician. There remains difficulty to recruit key positions across the business including electricians, engineers and plumbers.

The majority of customer enquiries for the water business continue to be from water leaks in water services and at water meters. There were a series of water interruptions throughout July as a result of broken water mains during road construction. Water Services and Engineering services have increased the focus on the alignment of the road and water construction programs.

Community consultation for the upgraded Sarina Water Treatment Plant began in July. The communication included a press release, 3 newspaper advertisements, a direct mail out to key stakeholders and 2 information sessions.

In early 2011 Water Services purchased a small trailer mounted vacuum excavator. The excavator was purchased to reduce Water Services reliance on vacuum excavation contractors. In July 100 hours of operation was reached on the unit. Feedback from the field is that new unit is assisting to improve turnaround times for small excavation works in the vicinity of other services.

The purchase of land for the new Wastewater Treatment Plant in Sarina was settled during the month. In addition the Material Change of Use for the land was lodged under Council's planning scheme. An application was made to the federal government under the *Environmental protection and Biodiversity Conservation Act* for the construction of the treatment plant.

One sewerage spill was reported to DERM. The spill occurred on the Sewage Rising Main from the Prawn Farm sewage pump station. Investigations into the cause are ongoing including earthworks that were being undertaken adjacent to the main at the time.

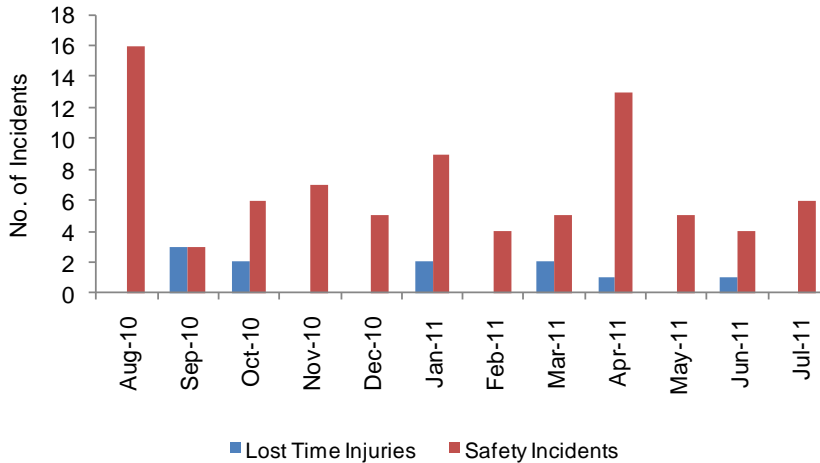
David Brooker for Jason Devitt
Director Water and Waste Services



SAFETY

1.1. Incident Statistics

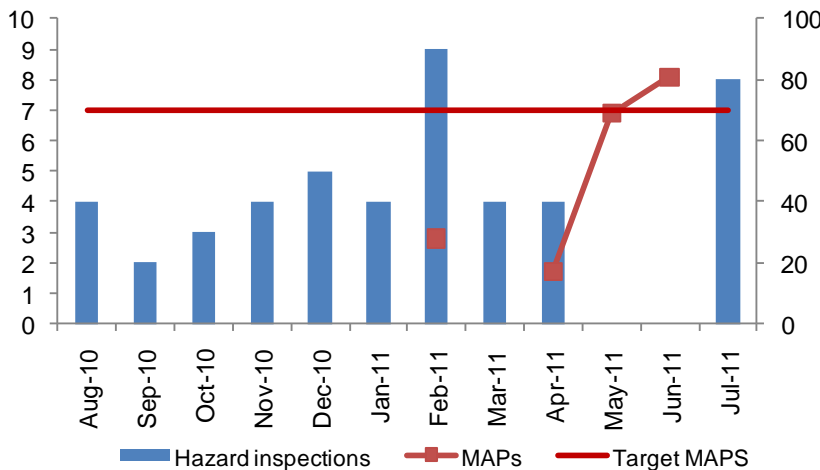
The incident statistic summary details a summary of the Water Services safety incident performance. Water Services aspires to achieve zero harm with a stretch target of zero injuries. Water Services has a target of 9 LTI for 2011/ 2012. This is based on a 30% improvement in the number of LTI's from the previous year.



- There were no LTI's for the month.
- Asbestos was identified in a broken wall sheet at a Water Services site.
- A plumber received an electrical shock while changing a water meter resulting from faulty electrical equipment earthed to the water pipe in a private residence.

1.2. Preventative Actions

To achieve improved safety performance a range of improvement initiatives are undertaken on a monthly basis. The following figure tracks the improvement process through implementation of the SafePlan Monthly Action Plans (MAPs) and the hazard inspections.



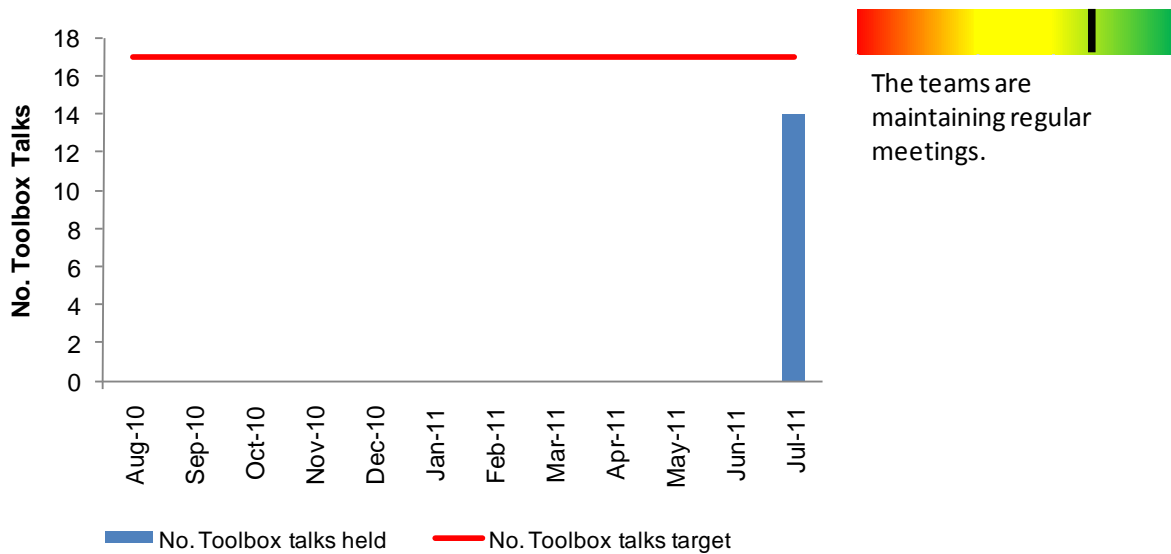
Improved focus on MAPs is being rolled out through tool box talks. This is having the result of increasing the completion of MAPs.



TEAM CULTURE

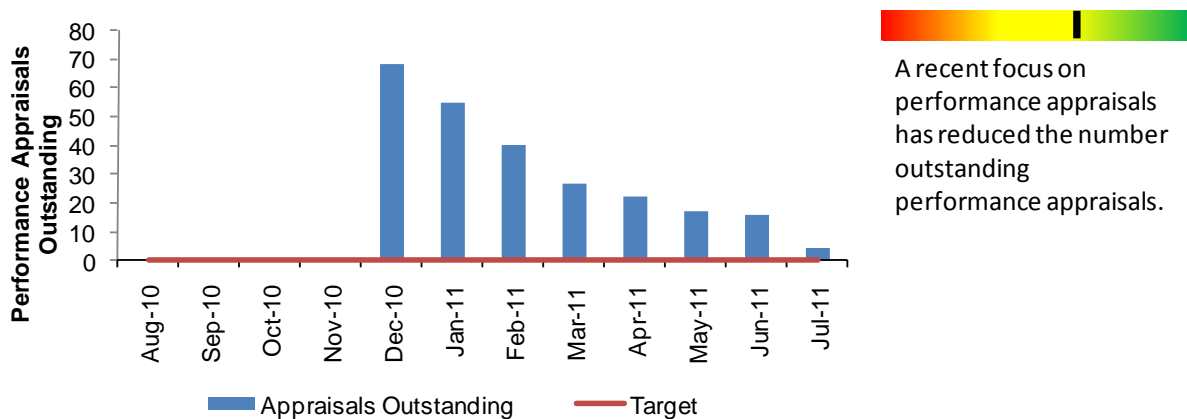
2.1. Team Engagement

Water Services believes that a high performing culture is an essential part of a successful business. The following chart tracks the initiatives to achieve an engaged, aligned and performing workplace culture through regular team meetings.



2.2. Performance Appraisals

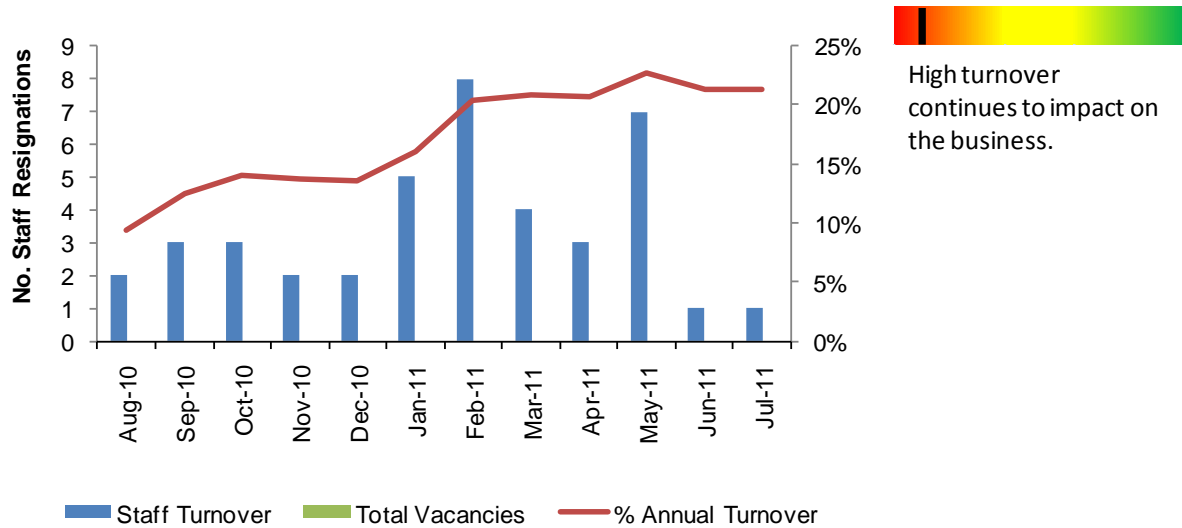
The following chart tracks the initiatives to achieve an engaged, aligned and performing workplace conducting regular performance appraisals.





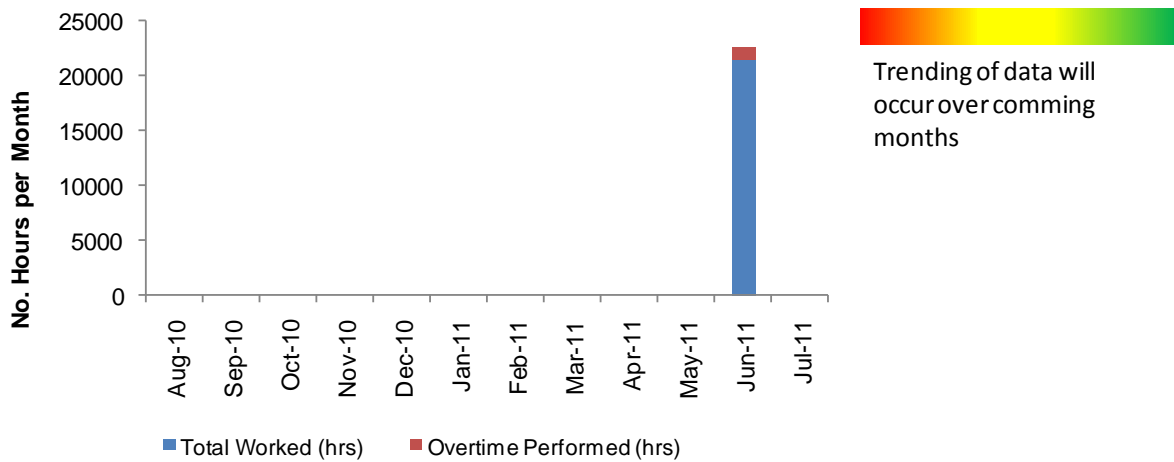
2.3. Turn Over

The following staff turnover statistics are presented as an indicator of staff stability in the business. The business aims to keep the annual turnover under 10%.



2.4. Operational Hours

The following chart details the productive hours worked during both normal and overtime. The graph excludes staff time on leave, training and down time due to wet weather.

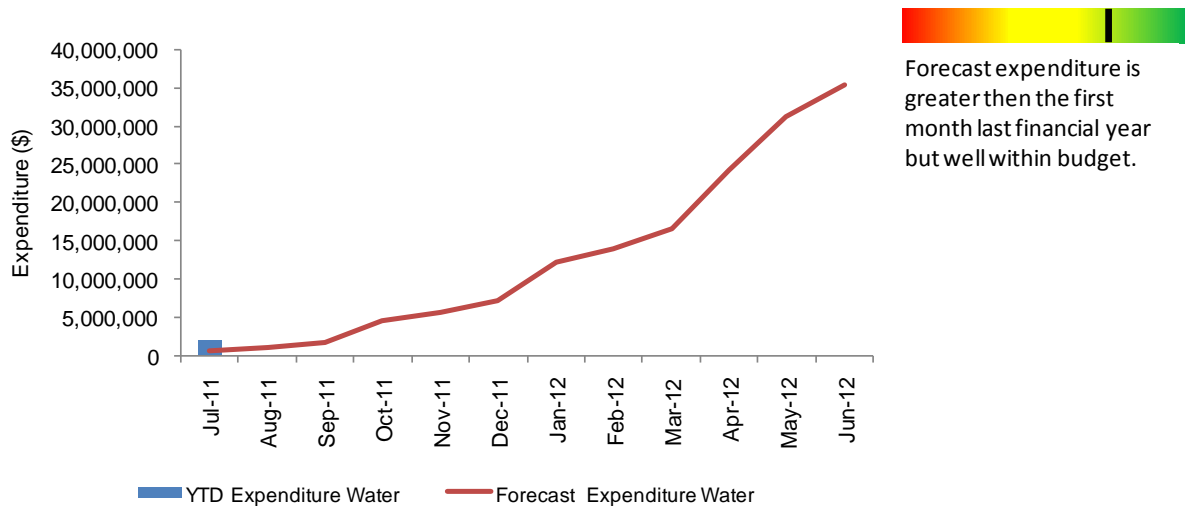




FINANCE

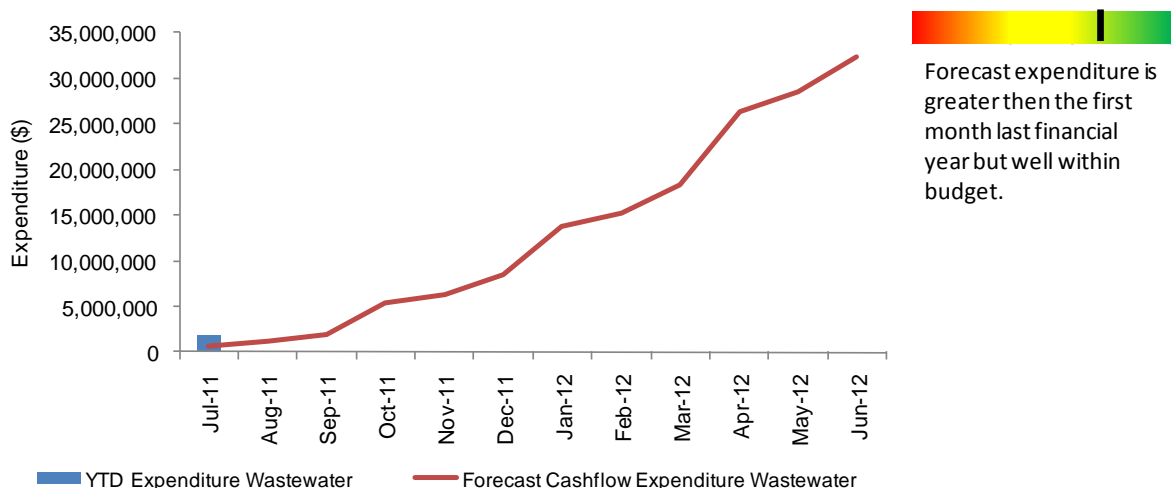
3.1. Water Expenditure

The following trend provides a high level overview of the water expenditure to monitor forecast expenditure against actual expenditure. The forecast expenditure profile has been derived from previous year's cash flows.



3.2. Wastewater Expenditure

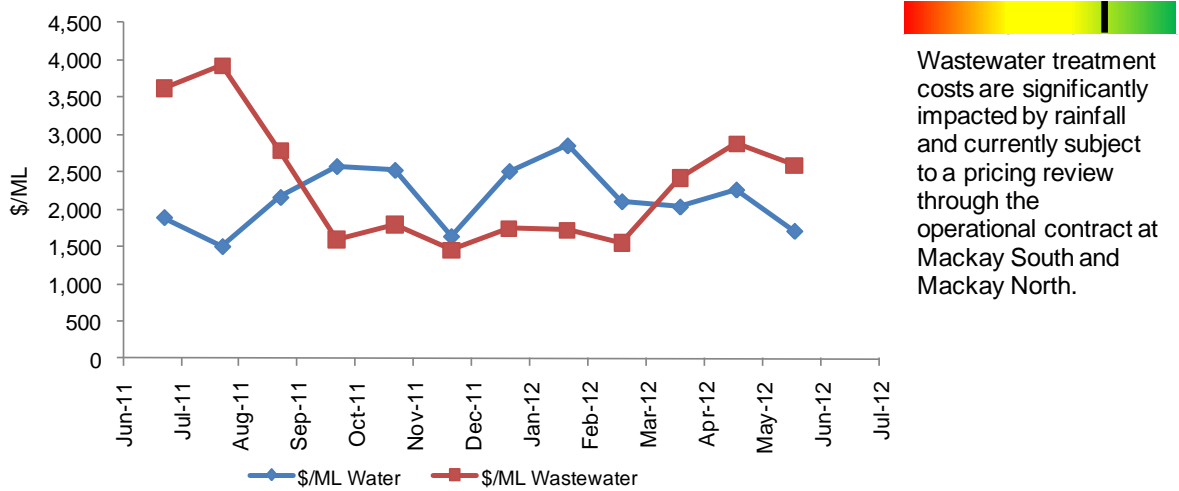
The following trend provides a high level overview of the wastewater expenditure to monitor forecast expenditure against actual expenditure. The forecast expenditure profile has been derived from previous year's cash flows.





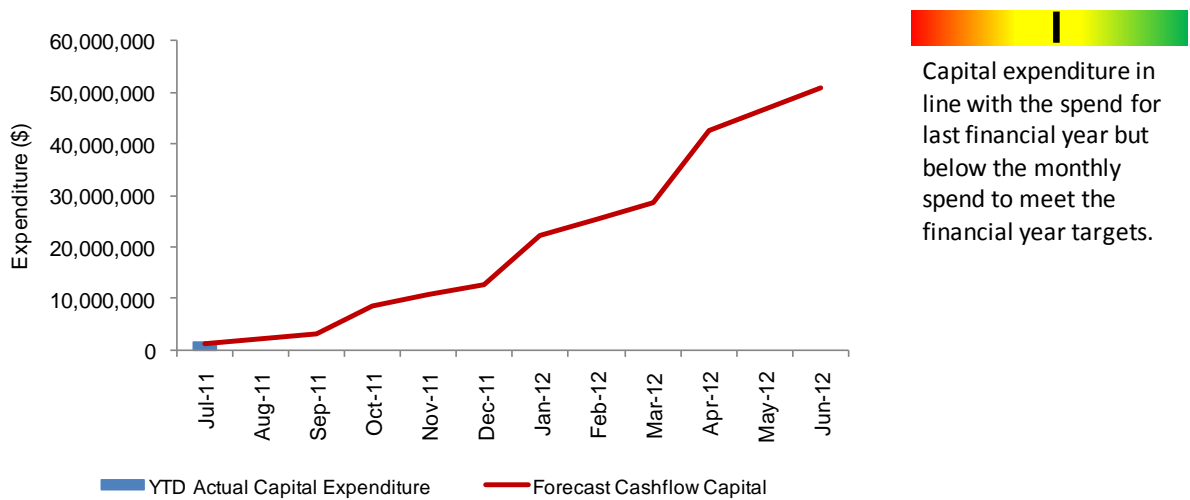
3.3. Operating Costs

The figure below details the average operating costs to treat water and wastewater in Mackay regional Council. Due to the high fixed costs associated with the treatment the \$/ML is significantly influenced by the prevailing weather.



3.4. Capital Expenditure Performance

The following trend provides a high level overview of the capital expenditure to monitor forecast expenditure against actual expenditure. The forecast expenditure profile is based on the project delivery schedule within Water Services.

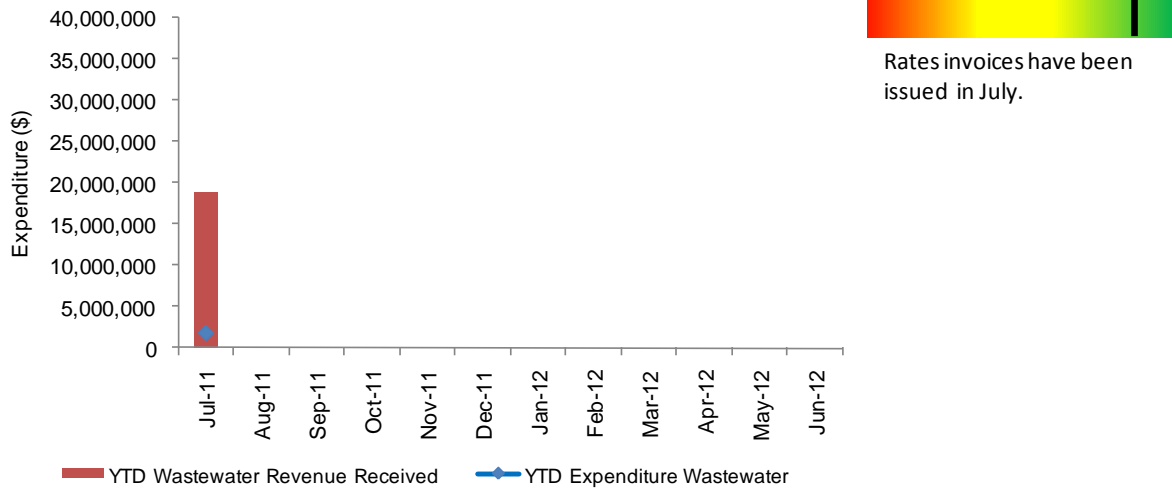




Water and Waste Services

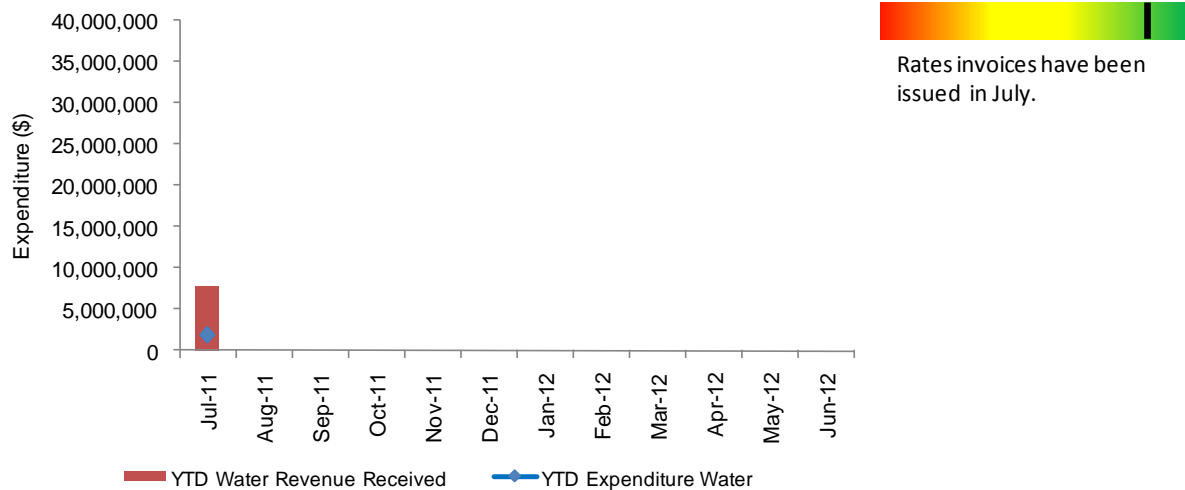
3.5. Wastewater Revenue

Wastewater revenue is collected biannually.



3.6. Water Revenue

Water revenue is received periodically through a combination of the access charge and consumption charge.





CUSTOMER SERVICE

4.1. Customer Requests

This graph details the customer requests received and recorded via pathways that relate to the Water Business. The target is to have 90% of all customer requests closed at anyone point in time.

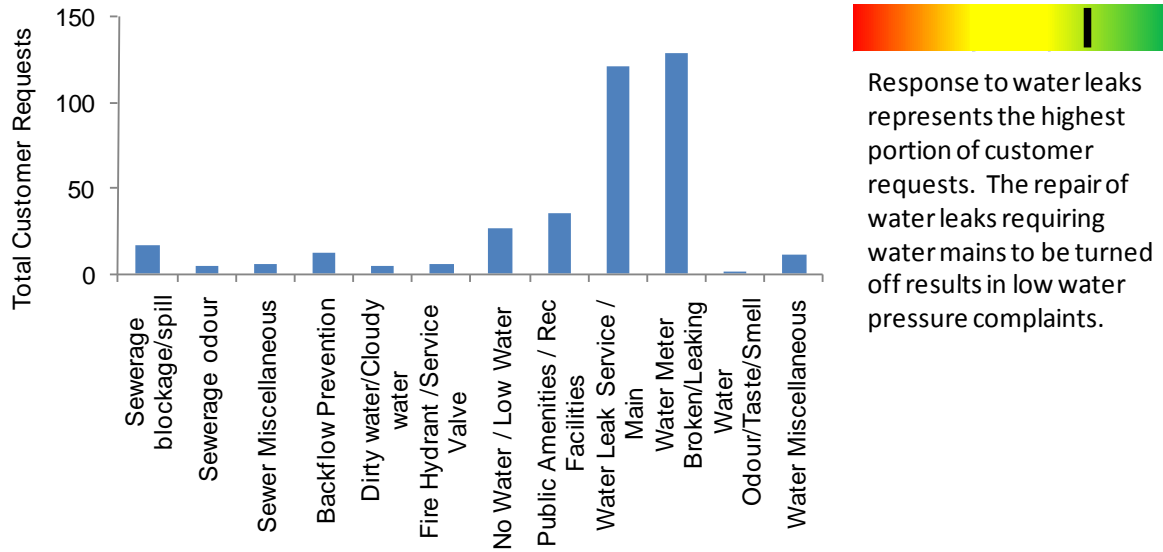


4.2. Request Types

The following chart displays a summary of the customer request types received for the month.

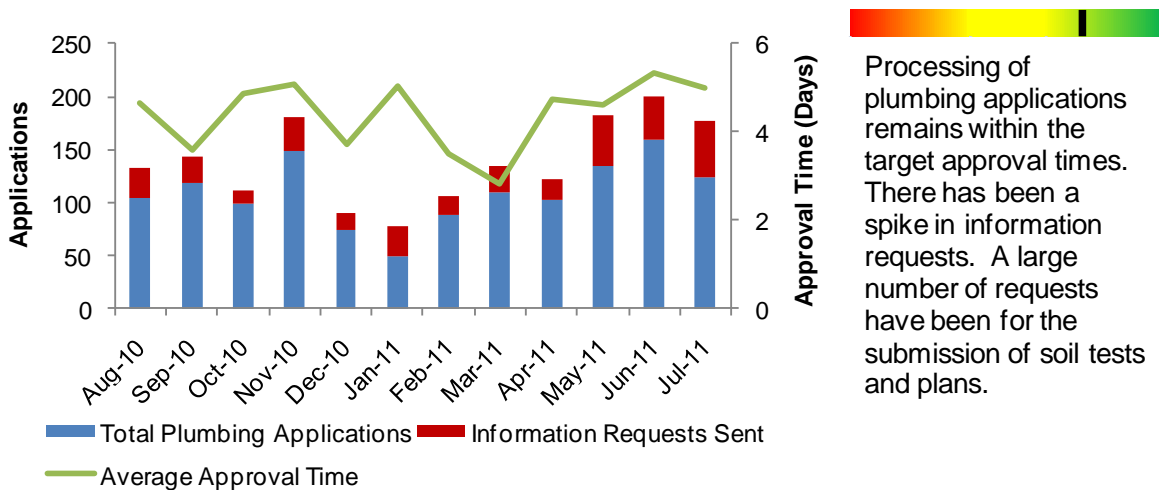


Water and Waste Services

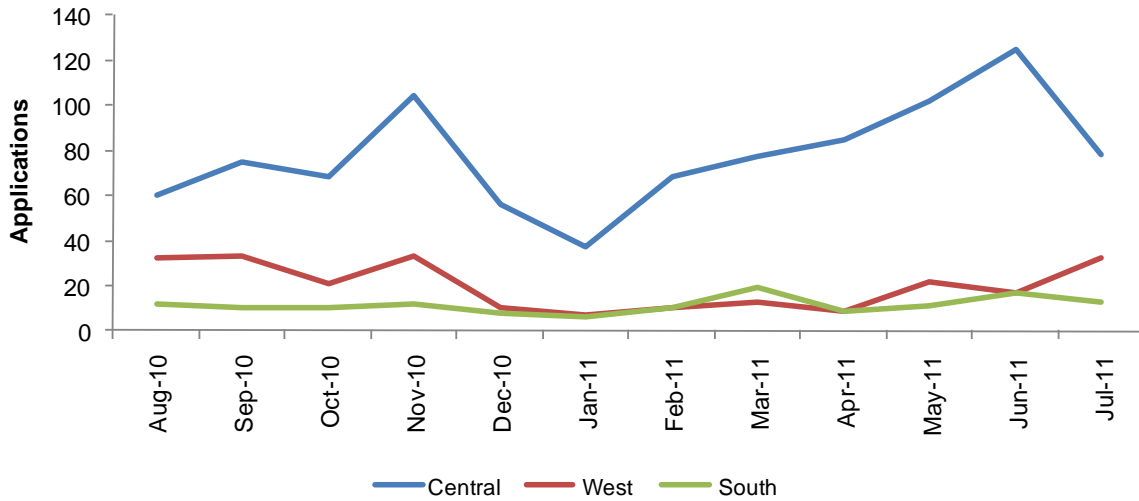


4.3. Plumbing Applications

In accordance with the Plumbing and Drainage Act a plumbing application is required for all new plumbing installations or modifications to existing plumbing. A plumbing application must be lodged to Local Government. Water Services has a regulatory time frame of 20 business days to assess a plumbing application. An internal target of 5 business days has been set for all residential plumbing applications.

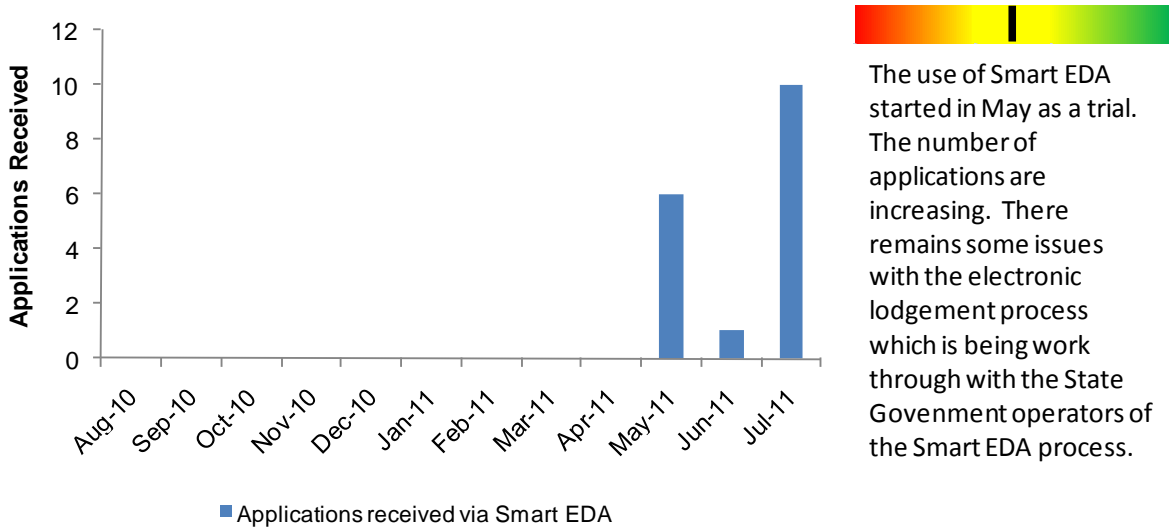


An indication of the amount of building activity in each population centre of the Mackay region can be derived by assessing the building activity by location. This is summarised in the table below.



4.4. Smart EDA Plumbing Applications

In May 2011 Water Services launched the ability for Plumbing Applications to be submitted electronically through the State Government Smart EDA service. Water Services is targeting 5% of all applications to be lodged electronically by the end of the 2011/2012 financial year. A pilot program for two participants was rolled out in May 2011. It is anticipated that the program will be available for all applications in August 2011. Less than 1% of applications were received via smart EDA in June 2010.

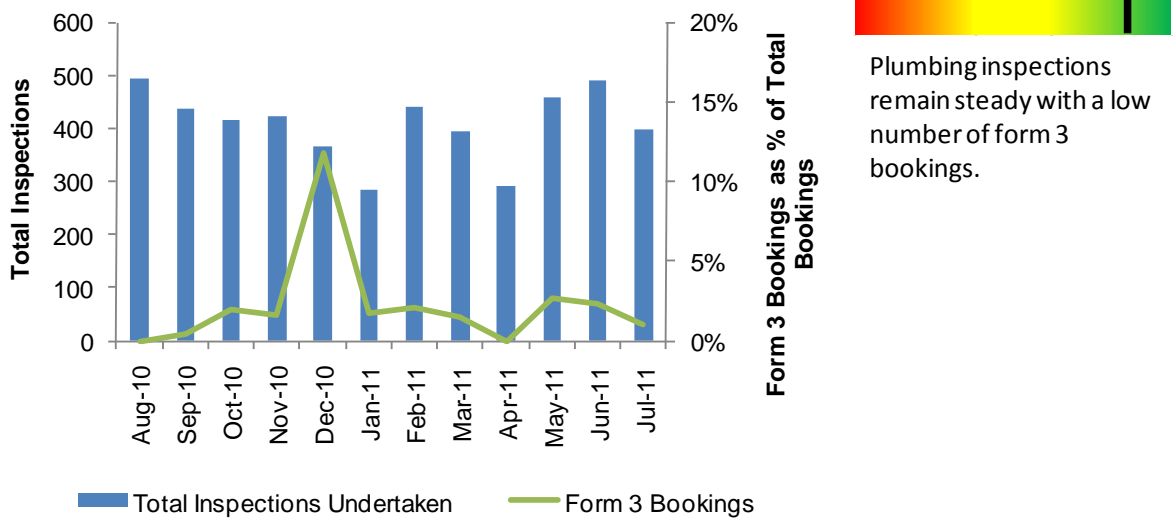


4.5. Plumbing Inspections

Plumbing inspections are undertaken throughout a building construction or renovation process. Typically 4 plumbing inspections are undertaken for each plumbing application. In accordance with the *Plumbing and Drainage Act* plumbing inspections must be carried out within 48 hours of a plumbing inspection being booked. If Water Services cannot attend the plumbing inspections within the regulated 48 hour period a plumber can proceed with a form 3 booking and proceed without an inspection, 1 hour after the 48 hour period.



Water and Waste Services



Plumbing inspections remain steady with a low number of form 3 bookings.

4.6. Trade Waste Approvals

The program for undertaking trade waste assessment and licensing of all applicable businesses that discharge trade waste is ongoing. As part of the Trade Waste Assessment process a temporary Trade Waste Approval is put in place while the formal approval process is undertaken. The table below summarises the number of Trade Waste Approvals in the Mackay Region.

	Total Approved Businesses	Temporary Approvals In Place	New Approved Businesses for the Month
Mackay South	363	62	9
Mackay North	25	0	0
Sarina	2	1	0
Mirani	1	0	0
	391	63	9

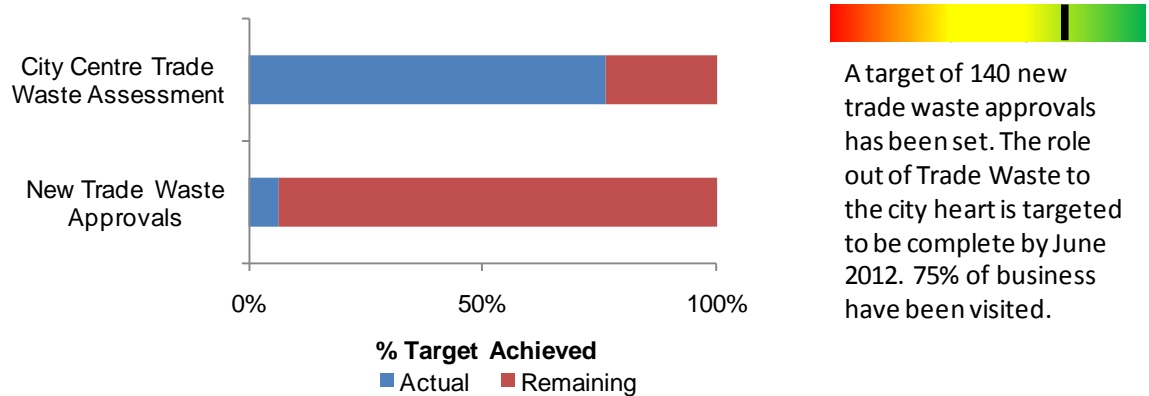
The focus for new approvals remains in Mackay City which falls in the Mackay South catchment.

4.7. Annual Trade Waste Targets

Annual targets are set for the Trade Waste team with respect to licensing Trade Waste Businesses. The two targets currently in place are to undertake trade waste assessments for all businesses in Mackay City by June 2012 and to achieve 140 new licensed businesses by June 2012.



Water and Waste Services



4.8. Trade Waste Compliance

Trade Waste compliance testing is undertaken on a routine basis for all trade waste generators that have pre-treatment devices installed. The compliance testing is aimed at ensuring that Trade Waste discharges will not adversely impact on the treatment plant. A summary of the trade waste compliance tests undertaken in each Wastewater Treatment Plant catchment is detailed below.

	Compliance Tests within Limits	Compliance Test Outside limits
Mackay South	62	17
Mackay North	8	0
Sarina	0	0
Mirani	0	0
	70	17

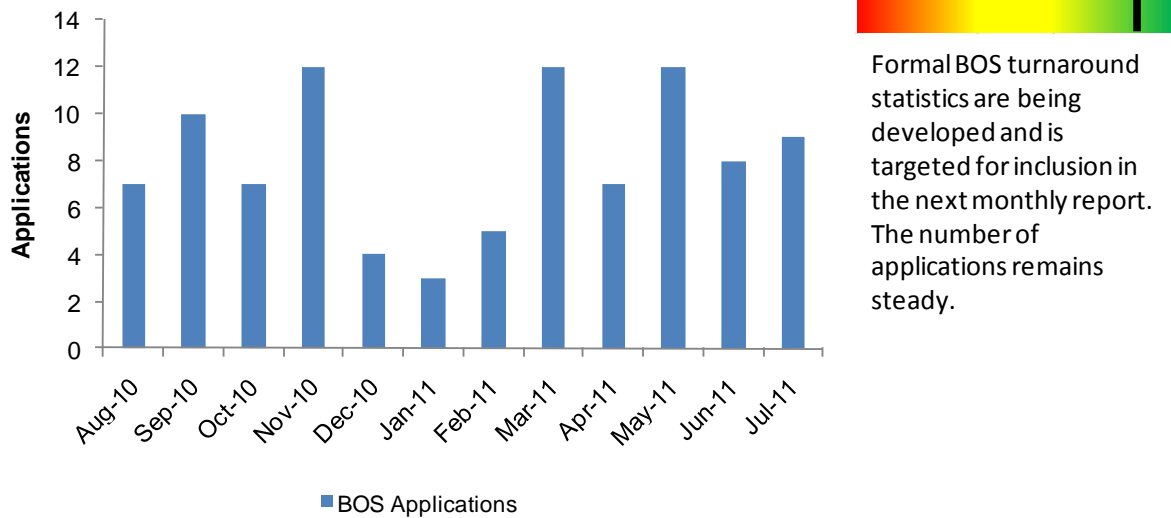
Pump out arrangements for pre treatment devices are put in place for businesses that do not comply.

4.9. Building Over Sewers

Building Over Sewer applications are lodged where the construction of a structure is proposed within close proximity of a sewer main. The application is assessed in accordance with Councils building over and adjacent to sewer policy. In accordance with the policy building over sewer applications are assessed within 20 business days. Future reporting will include performance against turnaround time targets.

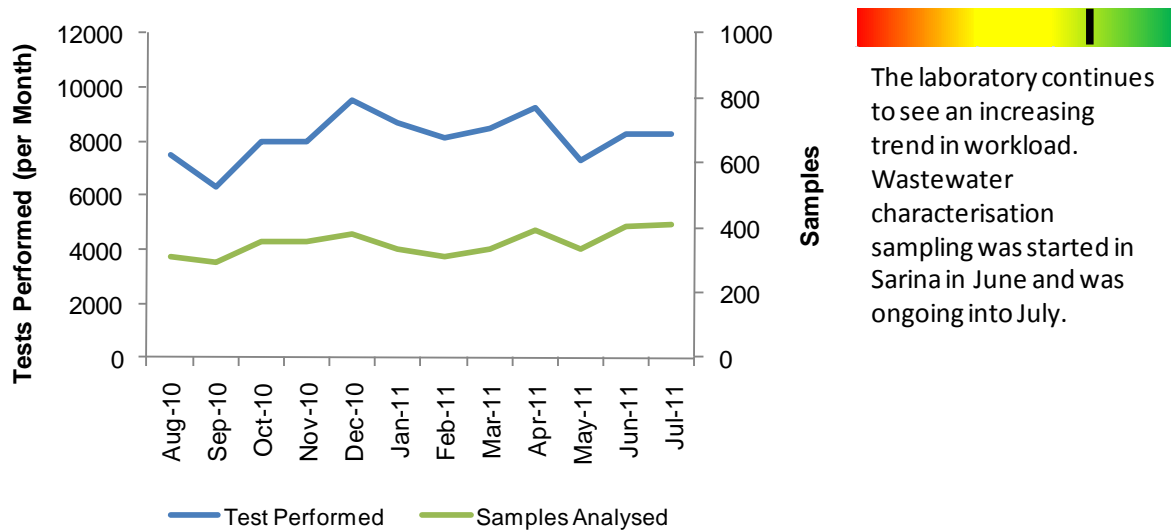


Water and Waste Services



4.10. Scientific and Analytical Services

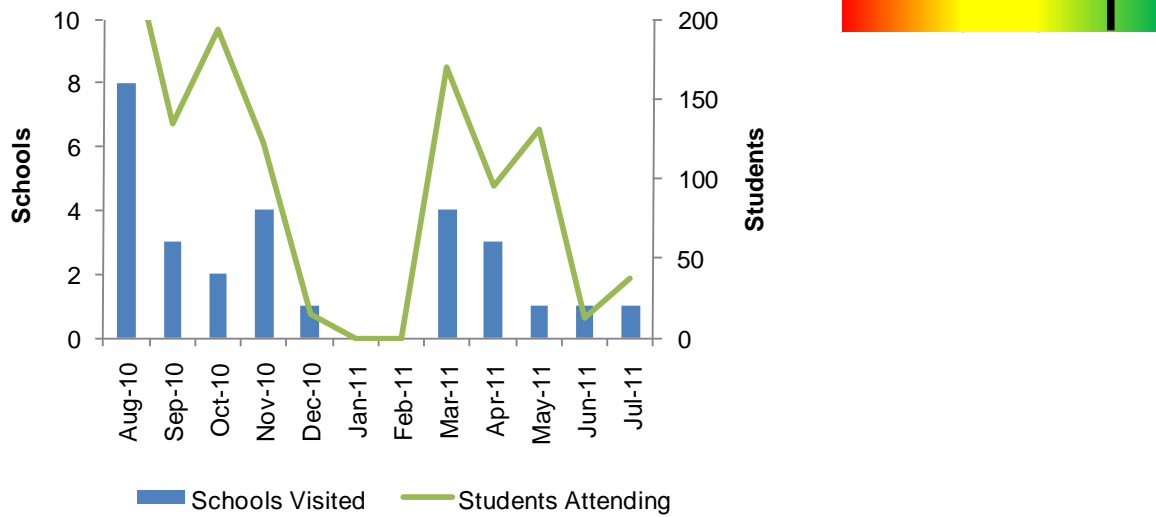
Scientific and Analytical Services provides laboratory analysis in accordance with National Association of Testing Authorities (NATA) Standards to both Mackay Regional Council and external customers. A summary of the laboratory activities are detailed below.





4.11. School Visits

As part of the community education program water services provides water and waste awareness sessions at schools. A summary of the program is detailed in the graph below including schools visited and students presented to.

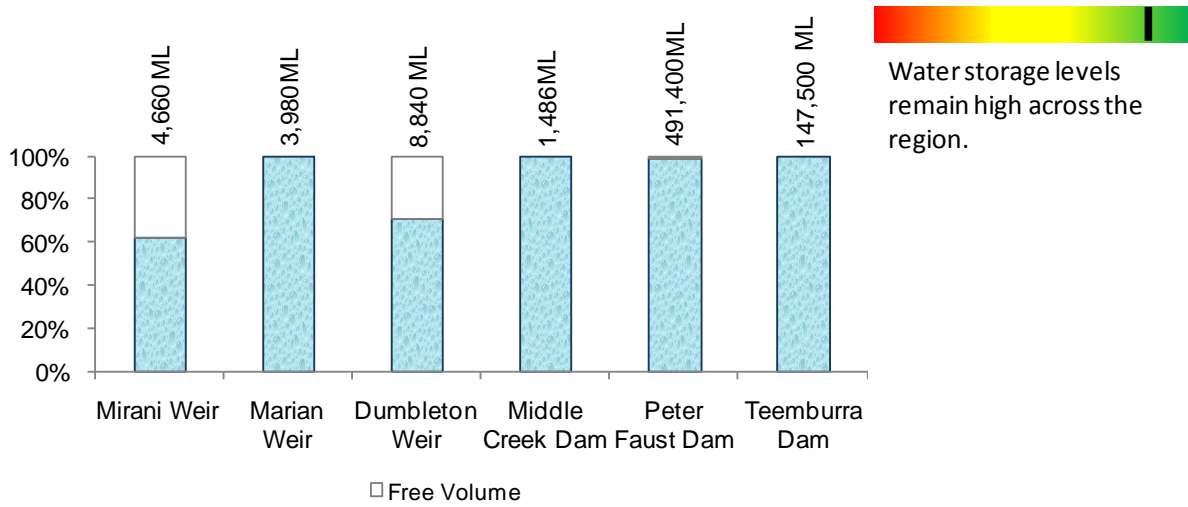




ASSET MANAGEMENT

5.1. Surface Water Raw Water Storage Capacities

Water Services sources water from a combination of surface water and groundwater sources. With the exception of Middle Creek Dam the storage facilities are owned and operated by SunWater. Middle Creek Dam is under Council’s control. The water stored in each of the storages is detailed below. Due to the higher than average rainfall and lower than average consumption the water storages remained high for 2010/2011.

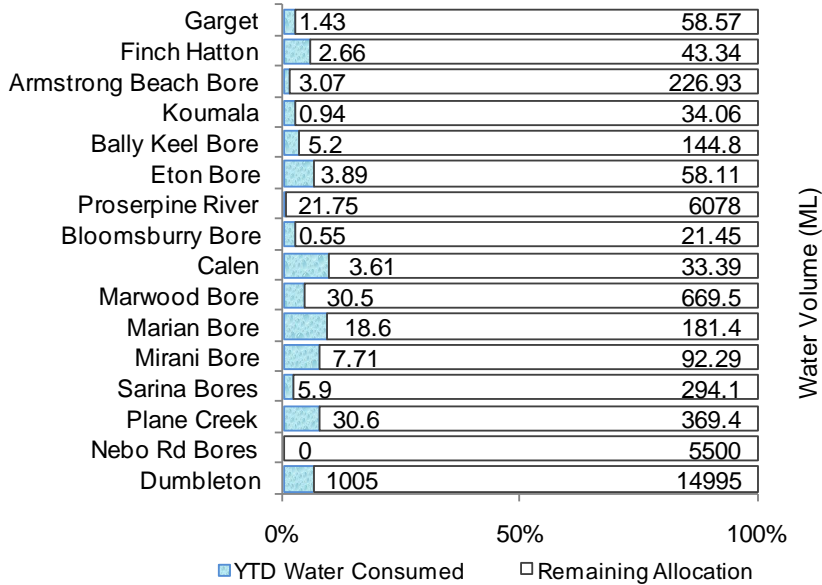


5.2. Annual Water Consumption vs Allocation by Source

Water Services has a water allocation or water license for each water source. The water allocation and year to date water consumption for each of the water sources is detailed below.



Water and Waste Services

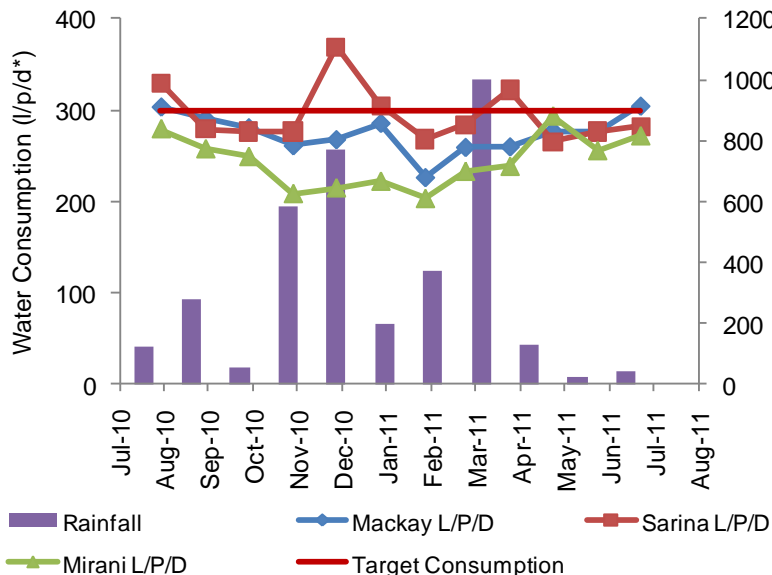


Water use at Mirani and Marian will remain high when compared to the allocation until a new water source is found. Water use at Calen will be monitored.

Water Volume (ML)

5.3. Water Consumption by Locality

Water Services supplies water to both residential and commercial water customers throughout the Mackay Region. The average water consumption in each of the three major community centres is detailed below. The water consumption is presented as litres per equivalent population per day. This provides a summary of water consumption including commercial water use.



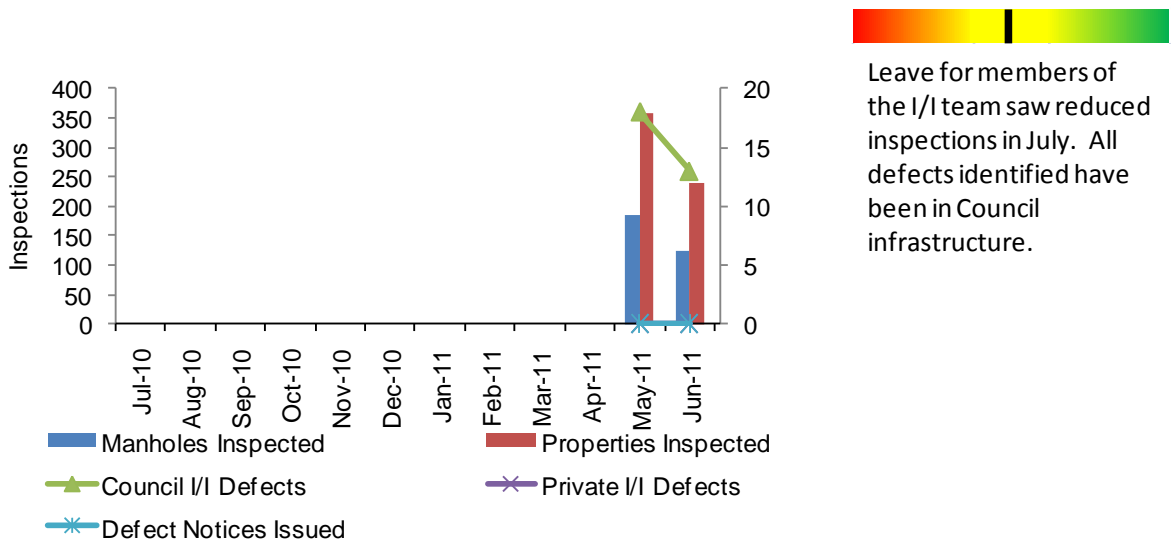
The water consumption across the region remains low. However it is anticipated that if the dry weather continues the water use will increase.

Rainfall (mm)



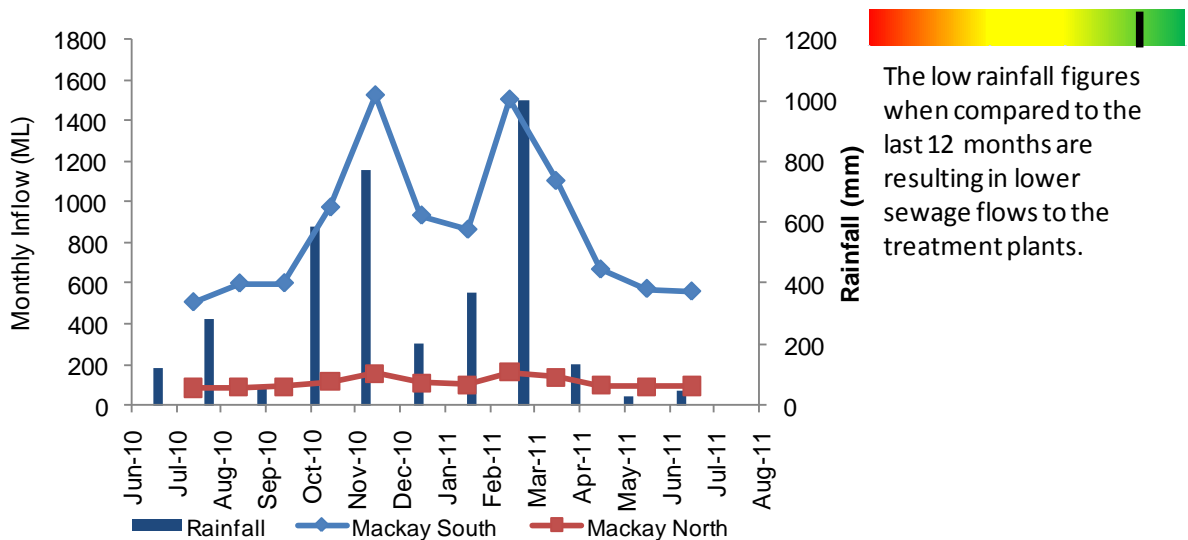
5.4. Inflow and Infiltration Program

The inflow and infiltration program is aimed at reducing the amount of groundwater and stormwater that enters the sewer network. Water enters the sewer system through both private plumbing and Council infrastructure. The program is designed to reduce the occurrence of sewer surcharges during wet weather events. A summary of the program activities is as follows.



5.5. Wastewater - Mackay North and Mackay South Inflows

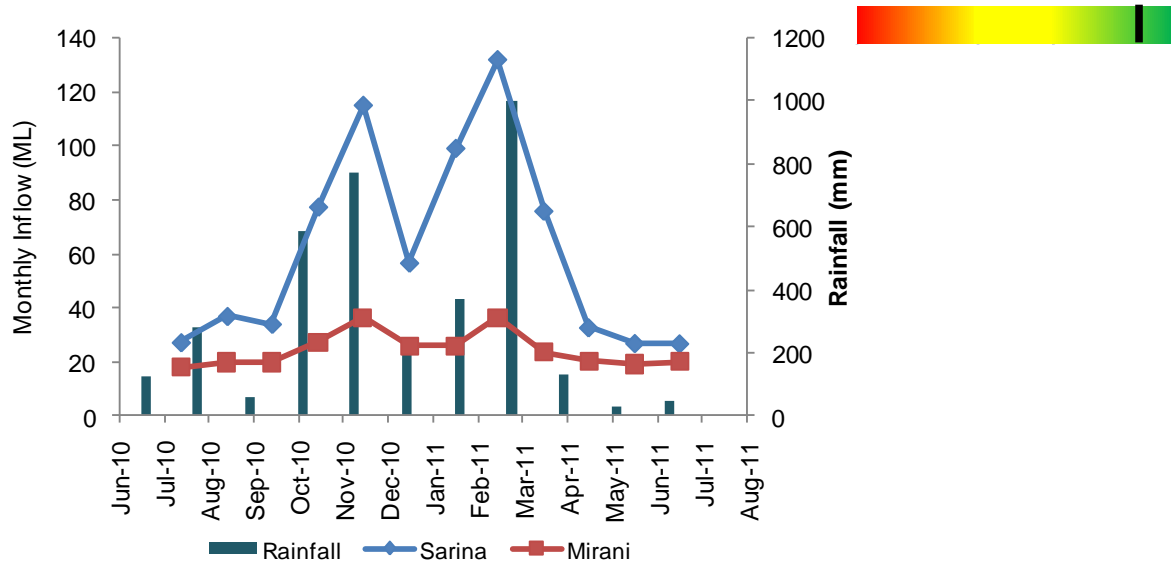
The inflow into Wastewater Treatment Plants is impacted by the number of sewage connections and the extent of inflow and infiltration. The monthly inflow into the Mackay North and Mackay South Water Recycling Facilities is detailed below.





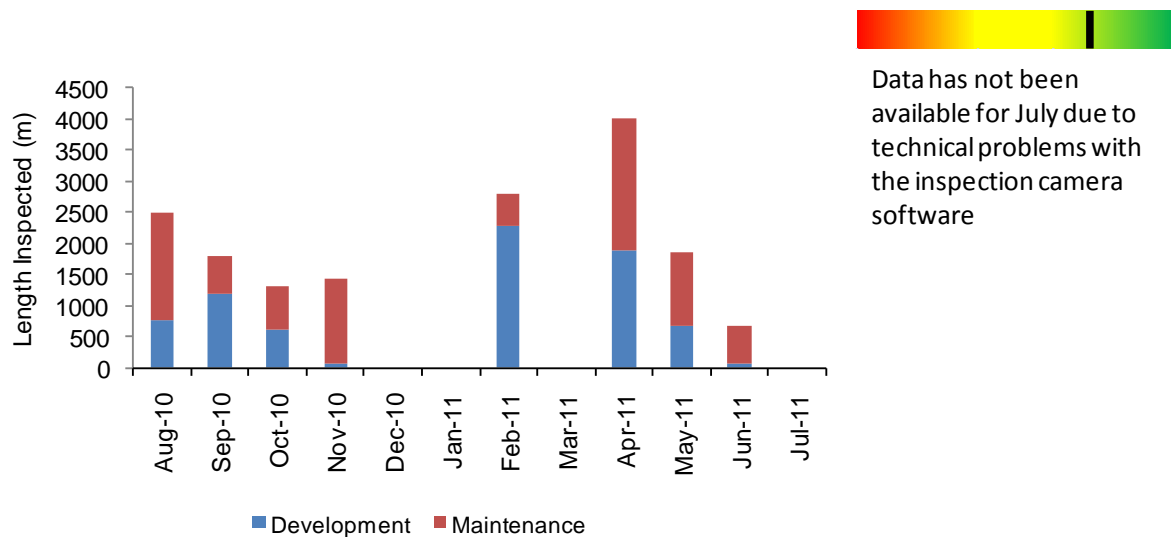
5.6. Wastewater – Sarina and Mirani/Marian Inflows

The monthly inflow into the Mackay North and Mackay South Water Recycling Facilities is detailed below.



5.7. Sewer Inspections - CCTV Camera

To protect and identify defects in the sewer system Water Services routinely undertakes CCTV inspections of the sewer system. CCTV inspections are undertaken for both developers as part of the process to create a new subdivision and on existing sewer assets as part of the routine sewer inspection program. A summary of the CCTV activity is displayed below measured as meters of sewer inspected.





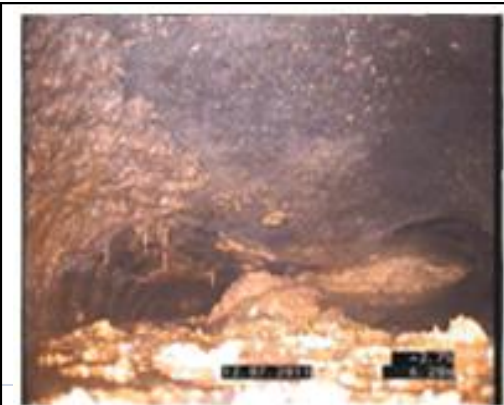
5.8. Projects

Water Services undertakes a range of projects across the water business. Projects take the form of Capital Projects, Planning Studies and investigations.

Program	Project	Status	% Complete	Budget	Time
P&S	Mackay Sewerage Strategy	Planning	90%	•	•
Completion of Mackay City Sewerage Strategy Plan Addendum. MIA Project budget being confirmed for completion of the remaining work. First Draft Report for circulation 15 August 2011.					
Program	Project	Status	% Complete	Budget	Time
P&S	Regional WS Strategy	Planning	20%	•	•
Regional Water (Quality) Supply Strategy. Koumala complete. Budget confirmed . Completion in December 2011					
Program	Project	Status	% Complete	Budget	Time
P&S	Calibration of Water Model	Planning	10%	•	•
Project Scope, Methodology and TOR being developed for budget confirmation purposes for 2011/2012. *Internal resources					
Program	Project	Status	% Complete	Budget	Time
P&S	Sub-metering Policy	Planning	99%	•	•
Development of a policy for Sub metering and an associated specification. Corporate approvals underway.*Internal resources.					
Program	Project	Status	% Complete	Budget	Time
P&S	Marian, Mirani WS Services Strat.	Planning	90%	•	•
Explore economies of scale in providing Trunk Infrastructure , with Sewerage as the most pressing service. Forecast 12 September 2011 for 1st draft report for circulation .					

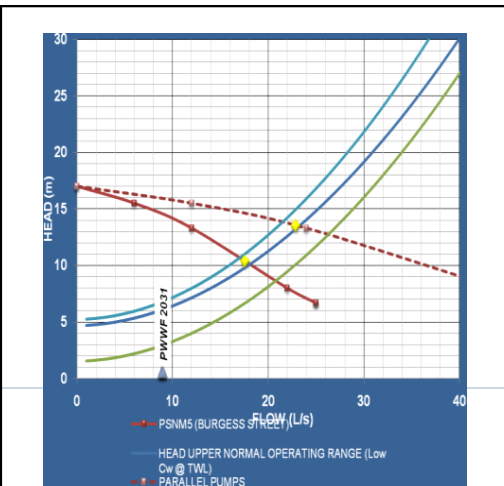


Water and Waste Services



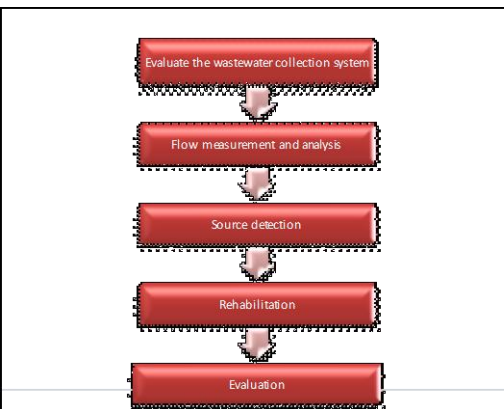
450mm sewer suspected partial collapse

Bucasia 450mm Sewer Collapse			
Status	% Complete	Budget	Time
Planning	75%		
Comments		Program	P&S
Emergent Project: Investigation for repair of 5 m deep 450mm Trunk Sewer to be carried out in Private Property. Further investigation by P&S confirms that this is an extremely difficult and complex repair due to unstable trench conditions, proximity of buildings, high water table, and OH&S hazards associated with the works. A key decision is required: sheet piling or secant grout piling			



Pump Delivery into relocated rising main

Burgess Street SPS Rising Main relocation.			
Status	% Complete	Budget	Time
Planning	75%	•	•
Comment		Program	P&S
Planning investigation to determine if it is feasible for delivery to be re-routed to the adjacent catchment. Preliminary Est. Capital Works value \$350k. Benefit is anticipated to be a direct reduction in overflow and spillage incidents in the area of the SPS and in the Gooseponds SPS Catchment. The attached graph shows that the hydraulic equations for the proposed system delivery balance. Hydraulic modelling to confirm no problems downstream of Oasis Drive SPS is underway.			



Components of I&I management

Inflow & Infiltration Audit Planning Investigation & Pilot			
Status	% Complete	Budget	Time
Planning	75%		•
Comment		Program	P&S
Planning investigation into two interdependent aspects: Determine improved reporting and monitoring and control of I&I program.			



Water and Waste Services

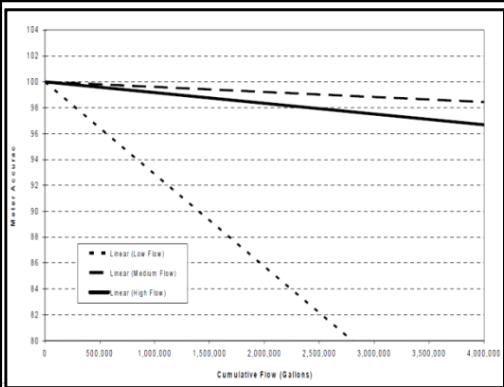


Proposed DMA installation

Demand Management: District Metered Areas (DMA's)

Status	% Complete	Budget	Time
Planning	95%	•	•
		Program	P&S

5 concept DMA's have been identified for detailed design, followed by construction. DMA's provide the best practice basis for assessing leakage levels on a continuous basis. Flow meters, instrumentation and fittings have been procured. A design package has been issued to Infrastructure Delivery for comment. The first DMA will encompass Slade Point.

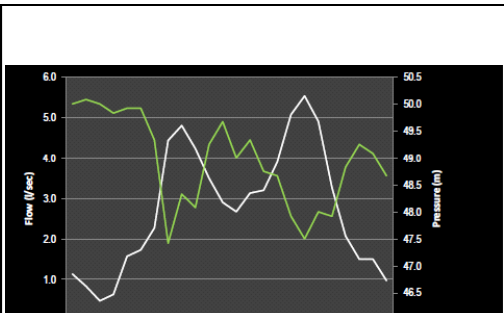


Meter error vs cumulative volume passed

Domestic Meter Replacement Strategy

Status	% Complete	Budget	Time
Planning	95%	•	•
		Program	P&S

Planning investigation into Economics based meter replacement . Includes for a Contract Project Specification for procurement in 2011/2012. Technical Specification is now complete and MIA is attending to 2nd formal review comments.



Flow & Pressure Vs Time

Sarina DMA & Water Loss Review

Status	% Complete	Budget	Time
Planning	75%	•	•
		Program	

Review of existing Sarina District Metered Areas and one pressure managed area to establish benchmark minimum Night Flows for future water loss assessment & trending. Image shown is a graph showing the MNF at one of the DMA inlets.

Program	Project	Status	% Complete	Budget	Time
ID	Manhole Repairs	Planning	0%	•	•
Rolling annual programme - liaison with operations and identification of projects commenced					




Water and Waste Services


Program	Project	Status	% Complete	Budget	Time
ID	Mirani Refurbishment & Enhancement	Planning/Design	50%		
Process design complete, engagement of design consultant for civil package in progress					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Goldsmith St SPS Upgrade	Planning/Design	85%		
Civil, structural and electrical design documentation issued to WS for review					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Gooseponds Upgrade	Planning/Design	85%		
Civil, structural and electrical design documentation issued to WS for review					


Program	Project	Status	% Complete	Budget	Time
ID	SPS - Base Hospital	Planning/Design	15%		
Scope definition in progress					

SPS No.2 Place Avenue - Rising/Gravity Main				
Status	% Complete	Budget	Time	
Construction	75%			
		Program	ID	
Rising main along Place Ave and underbore of Brooks Rd complete. Gravity main through Brewers Park in progress				
 <p style="text-align: center;">construction of gravity main</p>				

SPS No.2 Place Avenue - Pump Station				
Status	% Complete	Budget	Time	
Procurement/Tender	50%			
		Program		
Tender process for pump station has commenced Pre-lodgement meeting held with DERM to establish DA application format, application to be finalised and submitted by end of July.				
 <p style="text-align: center;">existing SPS No.2 Place Avenue</p>				
CRITICAL ISSUES				
Electrical design not finished yet				



Water and Waste Services

 <p style="text-align: center;">existing SPS No.8 Utah Avenue</p>	SPS No. 8 Sarina			
	Status	% Complete	Budget	Time
	Planning/Design	0%	•	•
			Program	ID
Scope definition required CRITICAL ISSUES Detailed planning brief and scope definition required to facilitate design				

Program	Project	Status	% Complete	Budget	Time
ID	Boundary Rd Switchboard	Planning/Design	0%	•	•
Standard electrical specification to be finalised for switchboards to be procured					

Program	Project	Status	% Complete	Budget	Time
ID	Scott St Switchboard	Planning/Design	0%	•	•
Standard electrical specification to be finalised for switchboards to be procured					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Holts Rd Switchboard	Planning/Design	0%	•	•
Standard electrical specification to be finalised for switchboards to be procured					

Program	Project	Status	% Complete	Budget	Time
ID	CSLP - Forgan Bridge Trunk Rising Main	Construction	100%	•	•
Cost share options brief presented to Council.					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Dump Rd	Planning/Design	85%	•	•
Civil, structural and electrical design documentation issued to WS for review					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Maryatt St Upgrade	Planning/Design	85%	•	•
Civil, structural and electrical design documentation issued to WS for review					



Water and Waste Services

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Prawn Farm	Planning/Design	85%	•	•
Civil, structural and electrical design documentation issued to WS for review					

Program	Project	Status	% Complete	Budget	Time
ID	SPS - Temples Lane	Planning/Design	0%	•	•
Scope definition in progress					

Program	Project	Status	% Complete	Budget	Time
ID	Sarina Water Recycling Facility	Planning/Design	30%	•	•
MCU and Federal EPBC applications submitted. Community consultation briefing sessions held at Sarina Depot. Preparation of TOR for engagement of SPS and rising main design consultant in progress. Preparation of project probity plan, D&C Expression of Interest and Contract documentation in progress					


Program	Project	Status	% Complete	Budget	Time
ID	TTS - Digitisation of MW Telemetry	Planning/Design	10%	•	•
Electrical Engineer from Nebo Rd WTP project joined ID team mid July. Review of Clear SCADA implementation proposal commenced. Radio survey for Mirani network commissioned					


Program	Project	Status	% Complete	Budget	Time
ID	STP - Seaforth Alarms	Planning/Design	0%	•	•
Scope definition in progress					

 <p style="text-align: center;">10 / 11 / 2010</p> <p style="text-align: center;">Pump Station No. 4 Webb Road</p>	Sarina SPS 3,4,5,6 & 8			
	Status	% Complete	Budget	Time
	Commissioning	100%	•	•
			Program	ID
Fully operational				



Water and Waste Services

Pumping Stations – Beaconsfield, Coles Rd, Gordon St &			
Status	% Complete	Budget	Time
Commissioning	100%	•	•
		Program	ID
 <p>Pump stations operational. Compilation of “As constructed” plans in progress</p> <p>CRITICAL ISSUES As Constructed documentation outstanding</p>			

Nebo Rd WTP Upgrade				
Status	Annual Budget	% Complete	Budget	Time
Construction			•	•
			Program	ID
 <p>Minor defects identified during plant performance proving being rectified. Internal road works and stormwater drainage substantially complete. Compilation of “As constructed” info in progress. Contractor has commenced demobilisation. Landscaping works in progress</p> <p>CRITICAL ISSUES</p> <ul style="list-style-type: none"> • “as constructed” plans, operation and maintenance manuals and asset data 				

Nebo Rd WTP

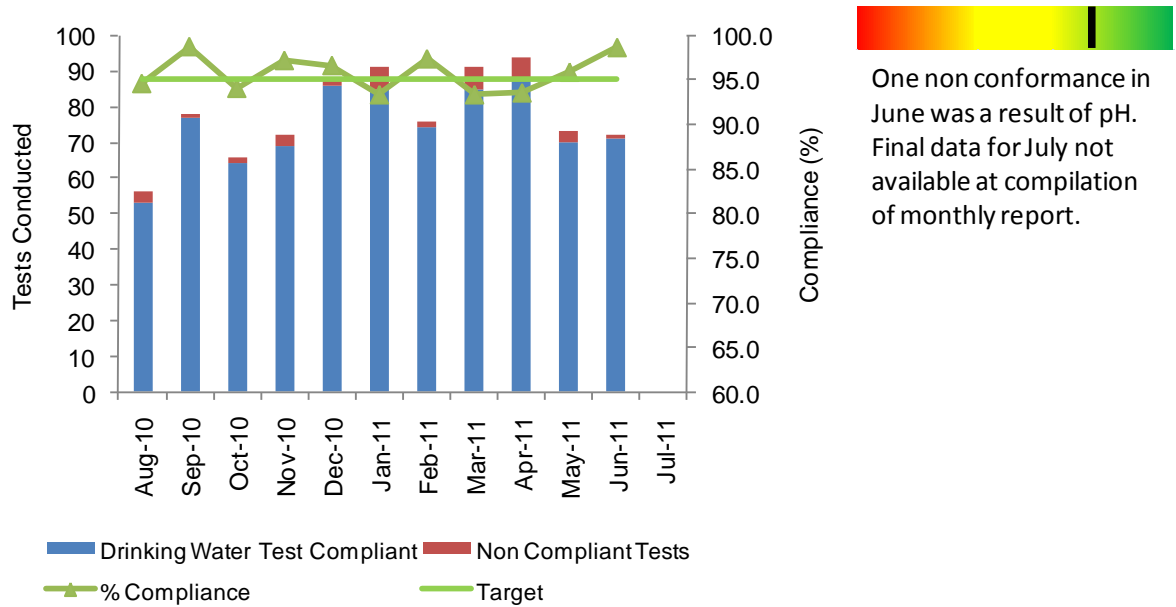
REGULATORY COMPLIANCE

6.1. Drinking Water Compliance

Safe Water supplies are provided in accordance with the requirements of the Water Supply Safety and Reliability act and as measured against the Australian Drinking Water Quality Guidelines. Drinking Water samples are taken at the outlet of Water Treatment Plants and within the reticulation network. A summary of the performance is detailed below.

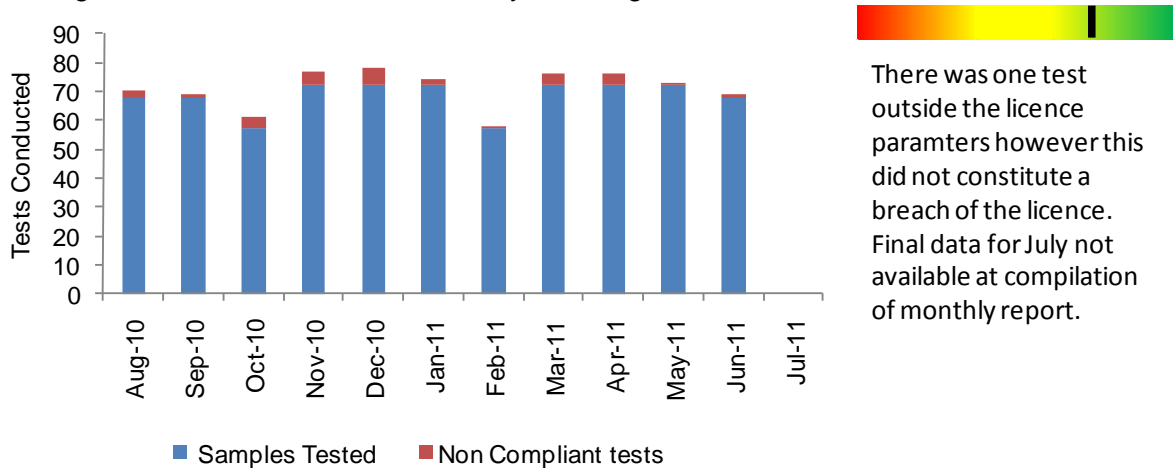


Water and Waste Services



6.2. Wastewater Compliance

The discharges from wastewater treatment facilities are regulated by Development Approvals issued by the Department of Environment and Resource Management. The licence requirements differ based on the time the Development Approval was issued and the receiving environment associated with any discharges.



6.3. Backflow Testing

Backflow devices are installed on water services where there is a risk that water could return from a private property back into the Water Reticulation network. The requirement for backflow devices is regulated in accordance with standard plumbing and drainage regulation.



Water and Waste Services

