



# Engineering and Commercial Infrastructure - Engineering

Monthly Review > 15 November 2014 to  
16 January 2015

# CONTENTS

<b>OVERVIEW.....</b>	<b>3</b>
<b>CIVIL PROJECTS.....</b>	<b>4</b>
<b>CIVIL OPERATIONS.....</b>	<b>6</b>
<b>TECHNICAL SERVICES.....</b>	<b>10</b>
<b>EMERGENCY MANAGEMENT.....</b>	<b>14</b>
<b>QUALITY ASSURANCE.....</b>	<b>17</b>

## OVERVIEW

### Overview

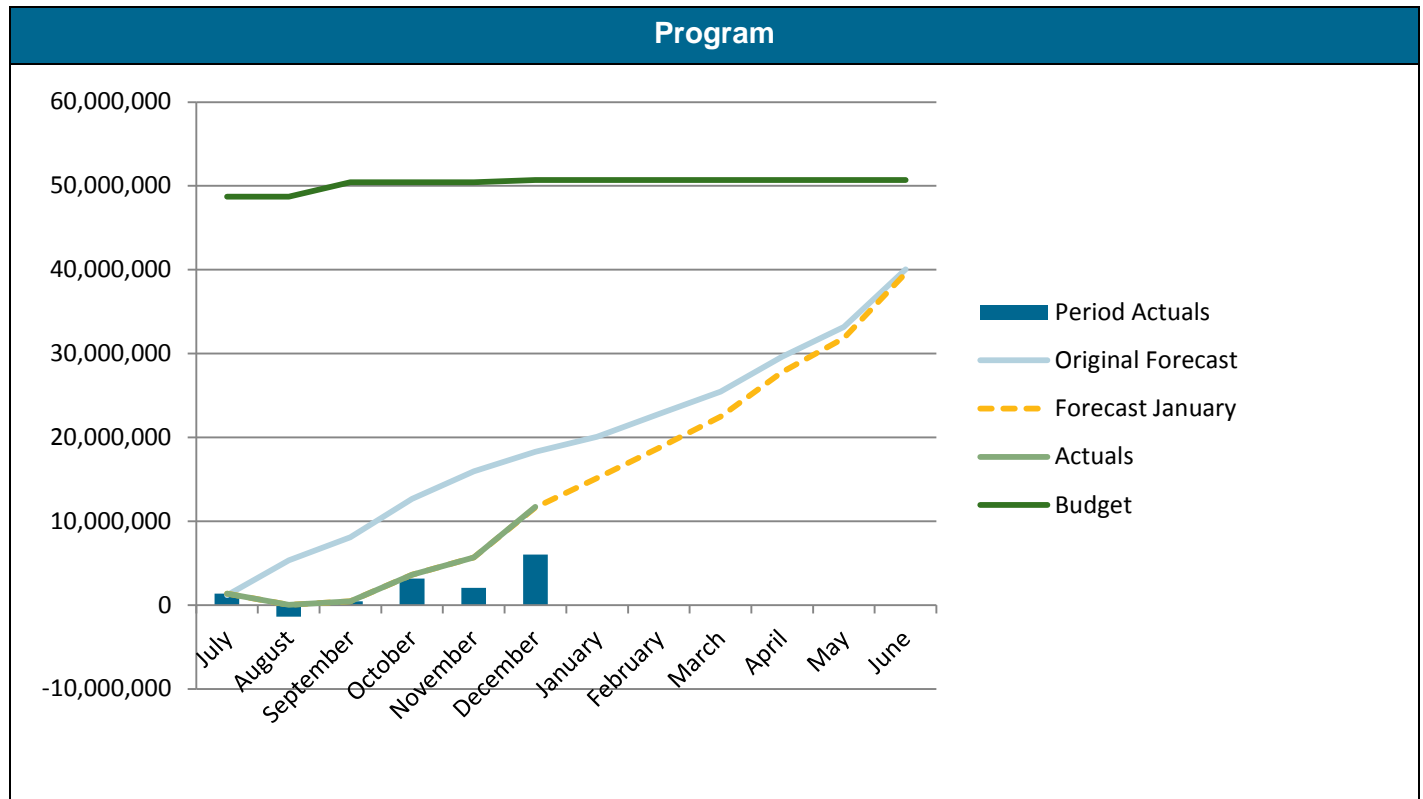
This report is for Engineering Services activities for November/December 2014 and January 2015. Please note that references to the November/December 2014 and January 2015 reporting period covers the period 15 November 2014 to 16 January 2015. Significant items in this period include:

- New emergency beach access constructed at Illawong Beach to assist emergency services accessing the beach area in the event of an aircraft accident.
- A skeleton crew based at Paget Depot worked through the Christmas – New Year closedown period to address client requests including after-hours emergencies and to continue the open drainage maintenance.
- The acquittal program for the 2011 and 2012 events restoration works was completed in the period with a huge effort being put in by both the NDRRA and QRA teams to meet the December completion target. The majority of the formal acquittal outcome advices have been received with favorable results.



**Director Engineering and Commercial Infrastructure**

# CIVIL PROJECTS



## Comments

The program is currently behind target with approx 36% expenditure to date. Forecast under expenditure for the complete program. Significant points to note include:

- Significant committals for land acquisition, services relocation, developer contributions and major design commissions that may not eventuate this financial year have not been included in the forecast. The value of these works equates to approximately \$8M. Portions of this may be expended however it is difficult to define an actual date so conservatively they have been excluded from the forecast.



**Murray Creek – Existing causeway on the left, new bridge construction on the right**



**Goosepond Creek Footpath – path under existing Bruce Highway Bridges**

Details of projects where under expenditure may occur are being reviewed as part of the December quarterly review process and will be reported back to council separately.

During the period significant progress was made on the resurfacing program with approximately 90% of the resealing program completed. The remainder of the resealing program and the asphalt program are programmed for early in the new calendar year.

Other works completed during the period included:

- Stockbridge street reconstruction
- Upgrade of Jubilee Park (Civil component)
- Monash Way drain

Progress continued on the bridge over Murray Creek on Rostiollas Road with all head stocks and piling completed. The deck units were programmed to be placed during the period however delays in construction of the headstock meant this did not occur.

Some issues may arise with this delay as the "wet" may cause further problems with access to the site in the new year.

The period also saw 85% of the new footpath along the Gooseponds between the Bruce Highway and Willets Road completed. Remaining works include the connection at both ends and protection works around culvert structures.

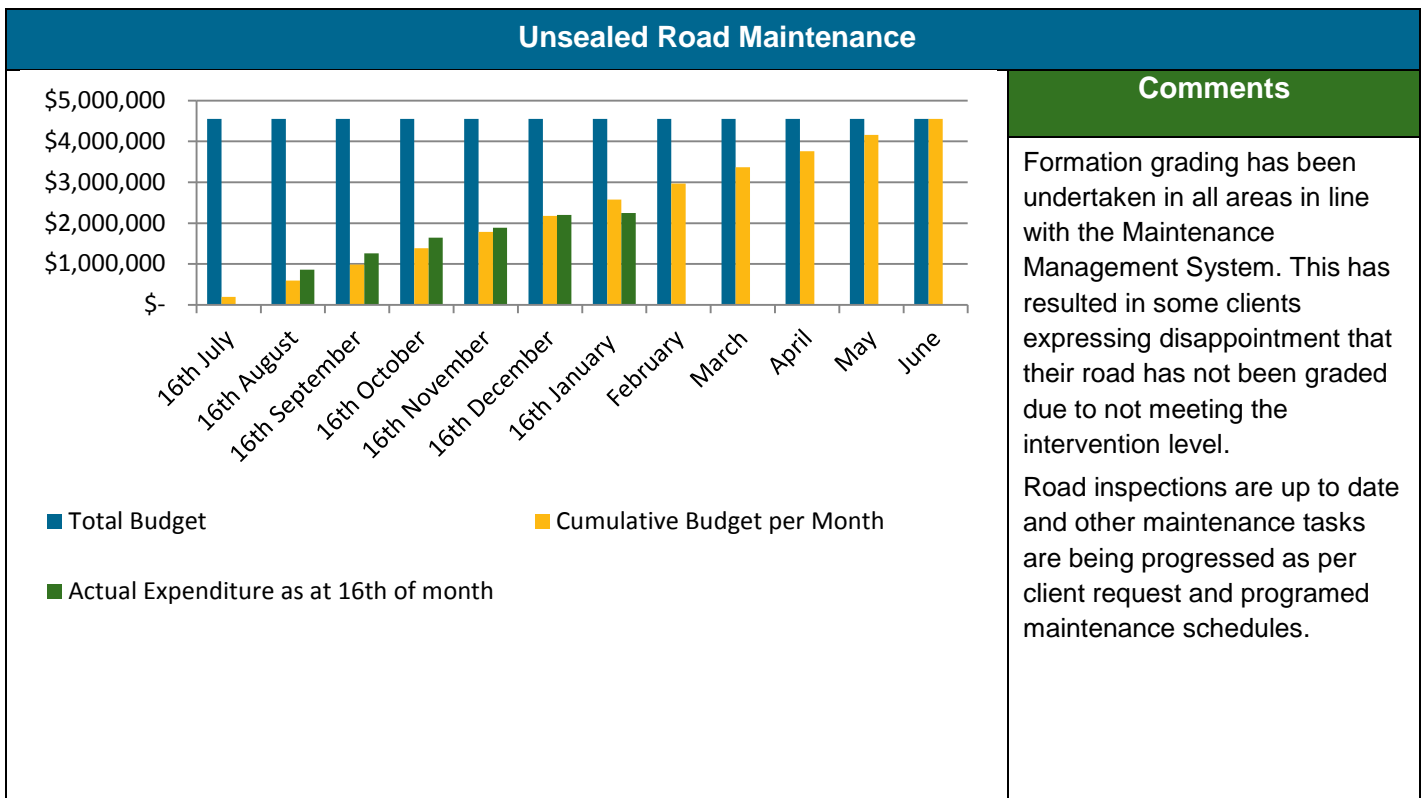
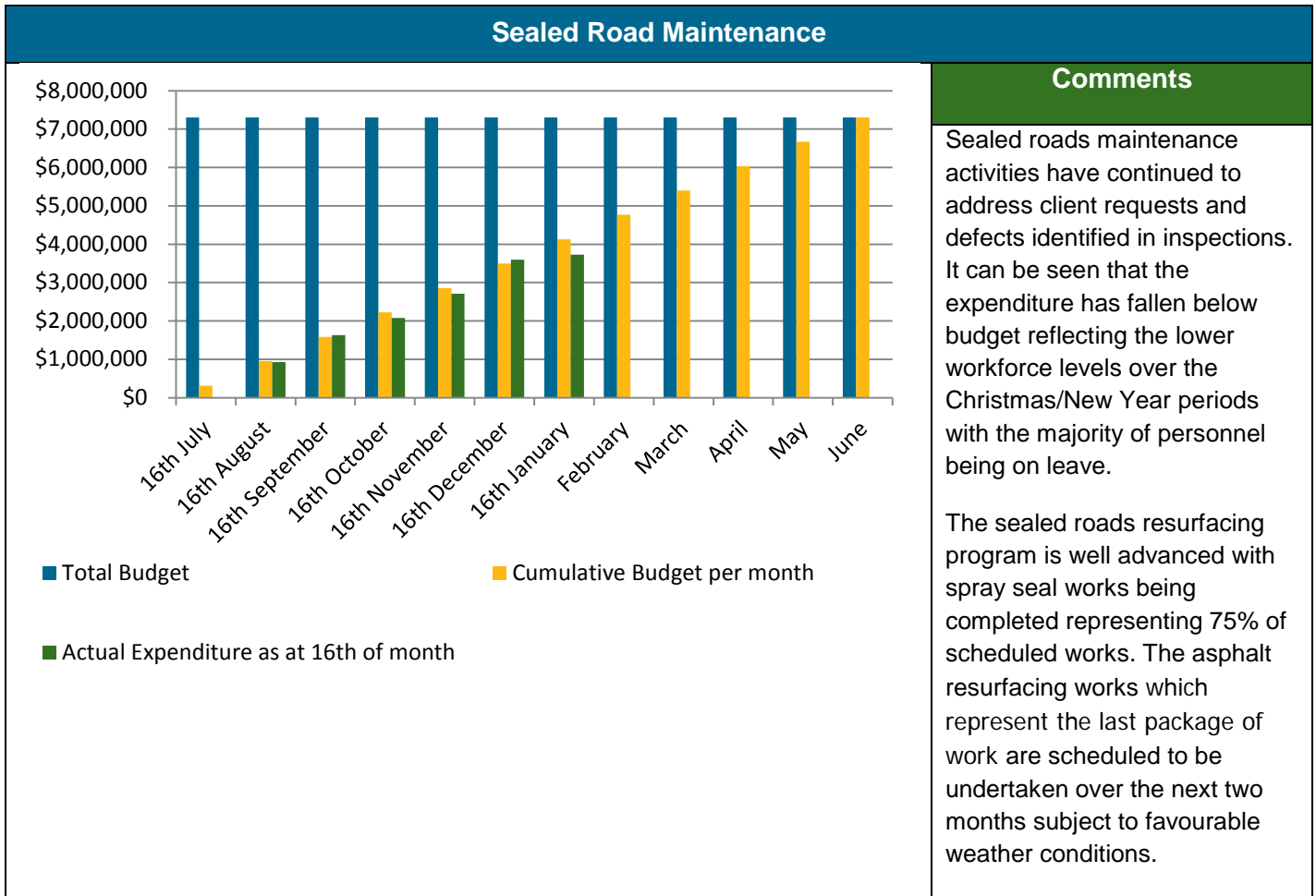


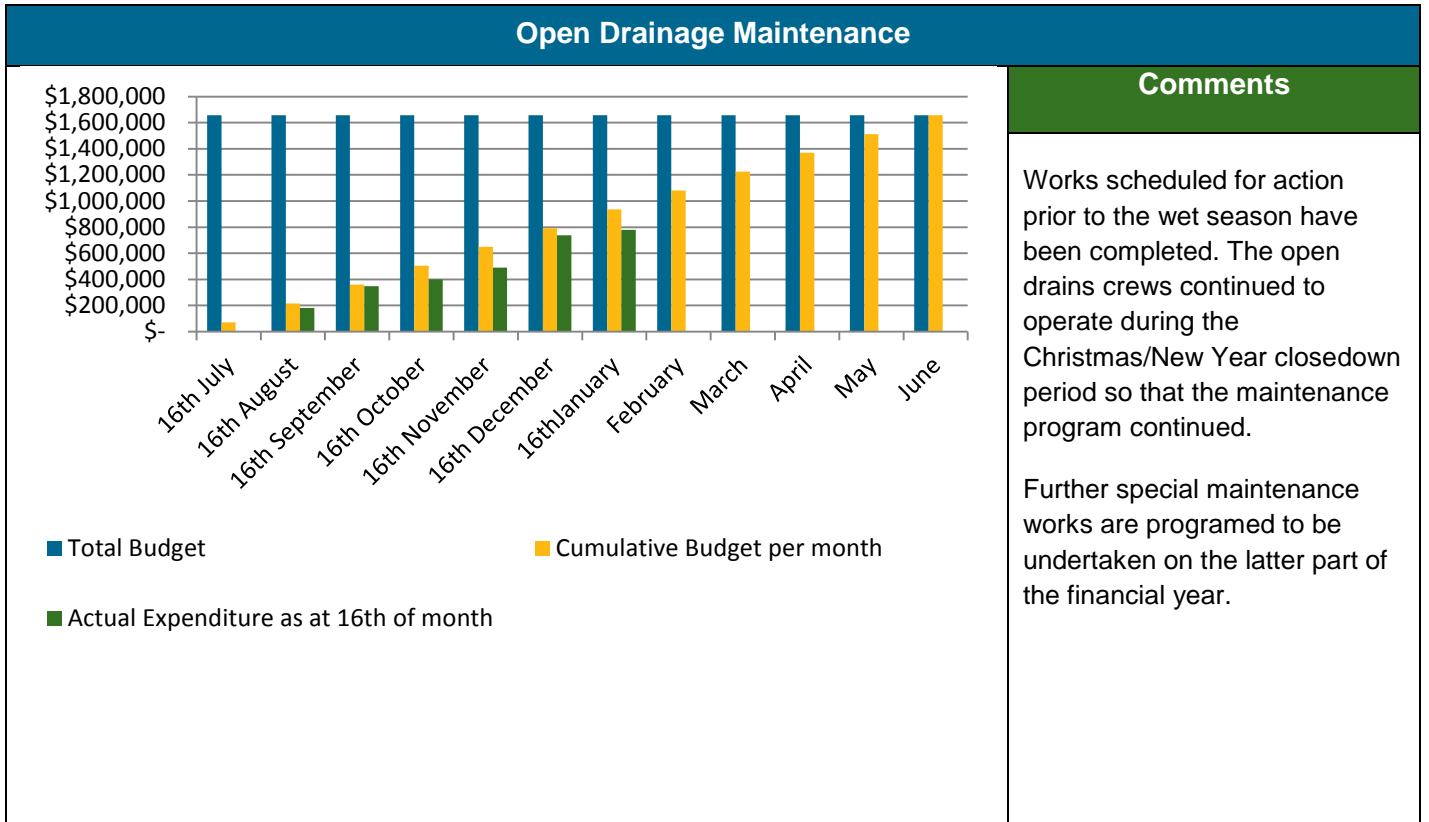
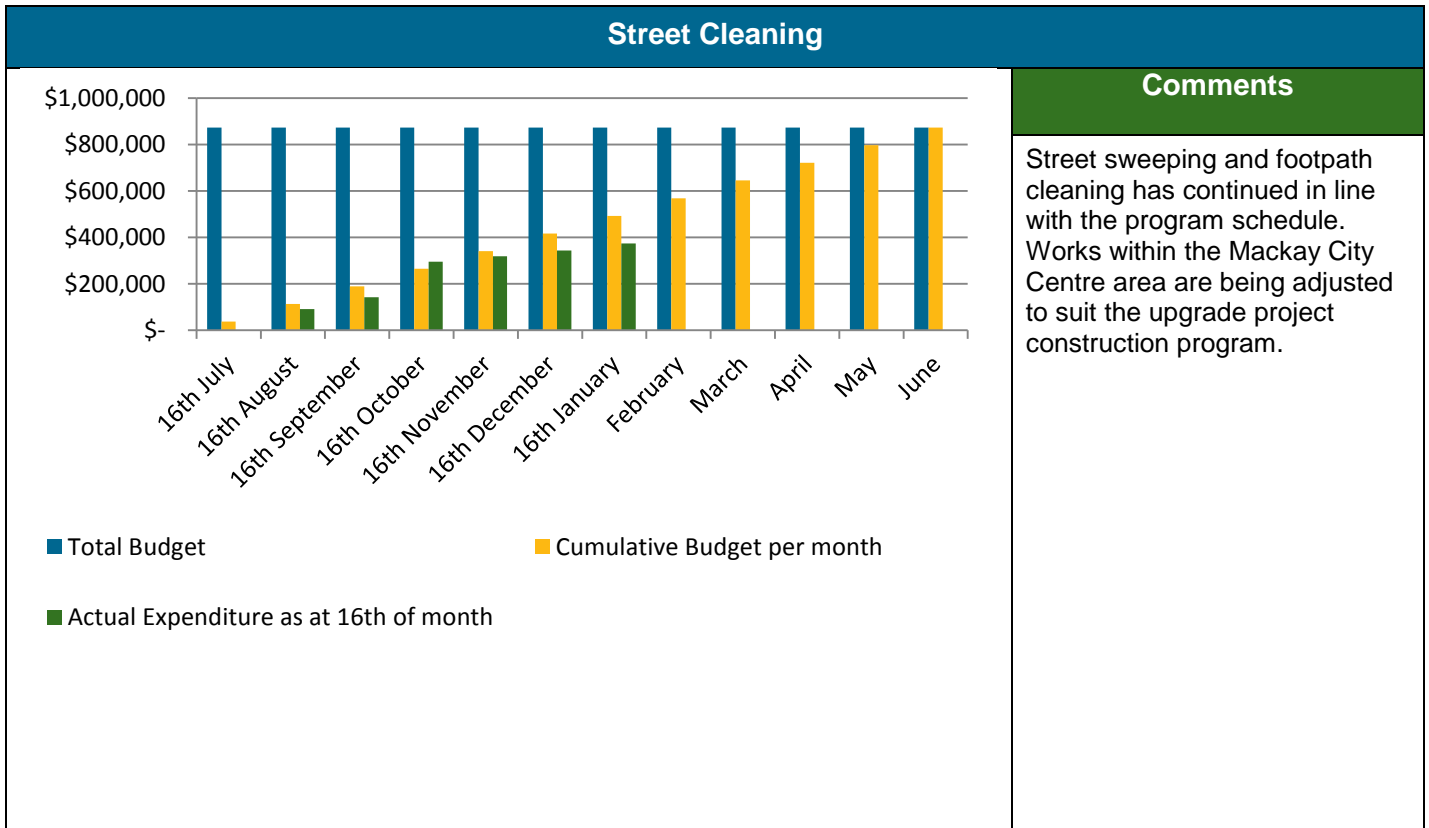
**Monash Way – Completed drain with concrete invert. Note that the sides of the drains are hydro mulched to promote vegetation growth giving the white appearance.**

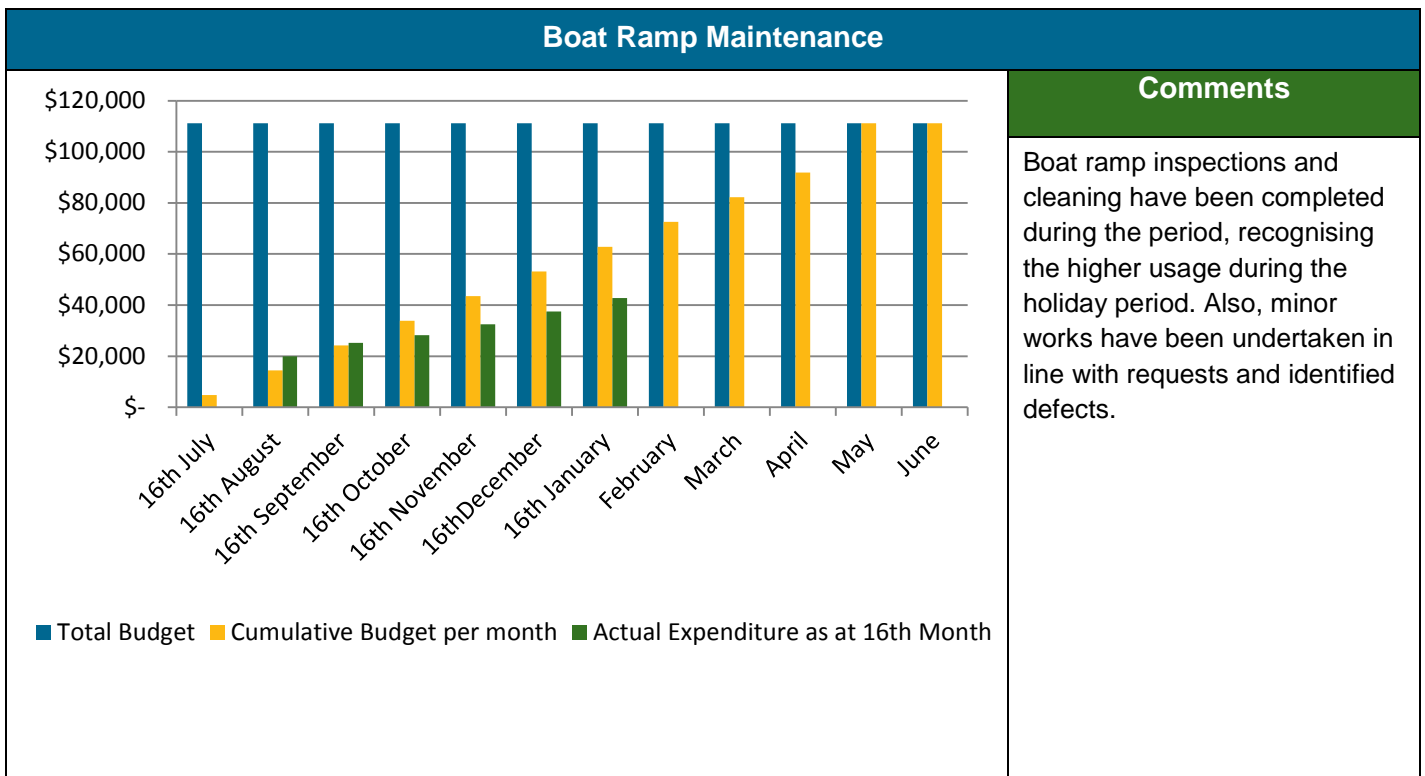
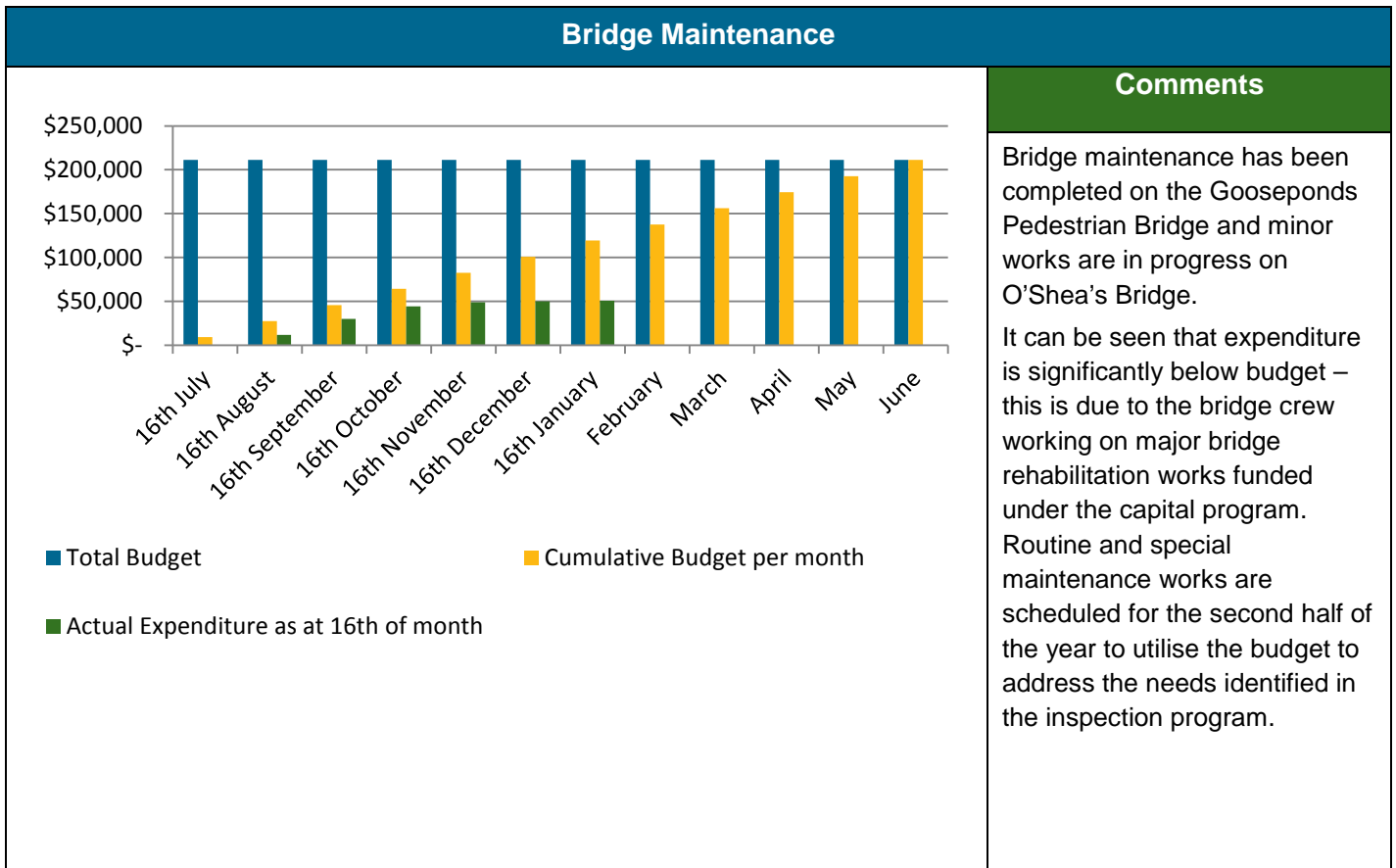


**Goosepond Footpath**

# CIVIL OPERATIONS









RMPC's		Comments																																						
<table border="1"> <caption>RMPC's Data</caption> <thead> <tr> <th>Month</th> <th>Forecast Expenditure</th> <th>Total \$ Claimed</th> </tr> </thead> <tbody> <tr><td>July</td><td>~200,000</td><td>~100,000</td></tr> <tr><td>August</td><td>~500,000</td><td>~200,000</td></tr> <tr><td>Sept</td><td>~900,000</td><td>~600,000</td></tr> <tr><td>Oct</td><td>~1,200,000</td><td>~1,100,000</td></tr> <tr><td>Nov</td><td>~1,500,000</td><td>~1,500,000</td></tr> <tr><td>Dec</td><td>~1,800,000</td><td>~1,700,000</td></tr> <tr><td>Jan</td><td>~2,100,000</td><td>0</td></tr> <tr><td>Feb</td><td>~2,400,000</td><td>0</td></tr> <tr><td>March</td><td>~2,700,000</td><td>0</td></tr> <tr><td>April</td><td>~3,100,000</td><td>0</td></tr> <tr><td>May</td><td>~3,500,000</td><td>0</td></tr> <tr><td>June</td><td>~3,800,000</td><td>0</td></tr> </tbody> </table>	Month	Forecast Expenditure	Total \$ Claimed	July	~200,000	~100,000	August	~500,000	~200,000	Sept	~900,000	~600,000	Oct	~1,200,000	~1,100,000	Nov	~1,500,000	~1,500,000	Dec	~1,800,000	~1,700,000	Jan	~2,100,000	0	Feb	~2,400,000	0	March	~2,700,000	0	April	~3,100,000	0	May	~3,500,000	0	June	~3,800,000	0	<p>Grading and resheeting works were completed on the gravel road network prior to the Christmas holiday period.</p> <p>Other general maintenance works were undertaken which included, vegetation clearing on Bucasia and Eimeo Roads.</p> <p>Roadside slashing works are programed to commence mid to late January, weather permitting.</p>
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**NDRRA Restoration Works**

**Overview**

The acquittal program for the 2011 and 2012 events restoration works was completed in the period with a huge effort being put in by both the NDRRA and QRA teams to meet the December completion target. The majority of the formal acquittal outcome advices have been received with favorable results.

The NDRRA team has now been finished up with hand-over to internal personnel being undertaken.

The Lessons Learnt NDRRA review has been completed and the final report has been received. A project plan for implementation of the improvements identified is currently being developed.

QRA are scheduled to release the final payments for 2011 and 2012 approved final claim value in January.

## TECHNICAL SERVICES

- Development and design of projects within the Capital Works Program (CWP) for 2013/14, 2014/15, 2015/16 and 2016/17.
- Development of draft 2015/16 and 2016/17 CWP and briefing to Council for subsequent adoption to allow design continuity.
- Development of 20 year CWP related to roads and drainage infrastructure for inclusion in and generation of the Long Term Financial Plan.
- Discussions with service providers to streamline design and construction processes.
- Following implementation of Department of Transport and Main Roads (TMR) specifications and estimates extend assessment to track actual unit rates to build history for future estimates. Incorporation of risk allocation into estimates process.
- Attendance at meetings in relation to: RSS Project Team, Project Management Framework Business Case Development, Mangrove Road Bus Interchange, WRRTG Technical Group, EBA update, Site meetings Walz Lane drainage, Culture in Action Workshop, Building Information session, Project Management Framework, Management Leadership Forum, Pioneer River Boat Ramp usage by Jet Boat, Canelands Xmas traffic flow, Adopted Infrastructure Charges Workshop, Transport and Drainage Advisory Board debrief, Planning scheme submissions review, Ergon meeting regarding HV corridor Wallmans Road, RRG Operational Guidelines review with Hyder consulting, Management Team Corporate Planning Workshop, Technical Services Co-ordinators Meeting, Reclassification Committee, Mackay Growth Allocation Model, Information Management Steering Committee, Harrup Park DA 2014-239 requirements, TMR Vines Creek upgrade design requirements, E&CI Program Managers Meeting & TMR preliminary design requirements meeting for Ring Road.
- Report to Council on Roads to Recovery Grant funding & Walking and Cycling Advisory Committee minutes.
- Participation in briefings to Council on Roads Review, NDRRA lessons learned, 2015/16 & 16/17 Draft and Indicative Capital Work Programs.
- Lead role in the development of the “Active Towns” strategy & delivery of Year 3 projects.

### Survey Services

#### Overview

- 40% of 2015/2016 CWP surveys completed.
- Machine control files prepared for: Active Towns Stage 2 and Stage 3 and Grasstree Beach Boat Ramp.
- Located water infrastructure assets at Calen, Finch Hatton, and Gargett.
- Cadastral surveys completed for Sarina Active Towns.
- Road off alignment investigations completed at Bagley Creek Road and Miles Road.

A variety of Survey projects and methods are undertaken internally to deliver required survey data for design purposes. For example hydrographic levelling undertaken in relation to the Shellgrit Creek drainage study design works related to excavation of the creek outlet and detention basin construction. Surveyed using GPS connected to the SmartNet Aus base network to give accurate coordinates.



Surveyors using GPS connected to SmartNet Aus

### Digital Cadastral Data Base (DCDB)

- Coordination of cadastral reference marks and office plotting continued for upgrade of DCDB in Habana/Balnagowan area.
- Reconnaissance started for upgrade of DCDB in Eton/Sarina Range area.

### Australian Height Datum (AHD)

- High order levelling of survey marks along Smyth Road, Sarina and Riley Road, Koumala completed.

## Design Services

### Capital Works Program (CWP)

- 109 of the 110 design projects in the 2010/11 CWP completed (99%). The project remaining is design works only associated with the reconstruction of Archibald from Connors to Milton and is delayed by confirmation of land acquisitions and proposed future realignment notice issues associated with the Milton/ Archibald intersection.
- 113 of 114 design projects in the 2011/12 CWP completed to date (99%). Project remaining is Milton Street Construction (Farrellys to East Boundary).
- 96 of 98 design projects in the 2012/13 CWP completed to date (98%). Projects remaining are the Archibald Street/ Central Park Drive intersection design only and the completion of floodway extensions Gawkowski's Road.
- 86 of 88 design projects in the 2013/14 CWP completed to date (98%). Projects remaining are East Boundary Road reconstruction and Victoria Plains Road intersection upgrade.
- 51 of 65 design projects in the 2014/15 CWP completed to date (78%).
- 35 of 74 design projects in the 2015/16 CWP completed to date (47%).
- Those outstanding require land acquisitions, valuations, input from service authorities, which is delaying completion of the design.
- Commencement of CBD drainage study – data collection of underground asset data and survey commencing and detail design.
- Commencement of Shellgrit Creek outlet and alternative Beach Outfall drainage designs – detail survey and design brief development commenced.
- Detailed design of Glenpark Overpass duplication proceeding including detailed geotechnical investigations.

### Major Projects for delivery next month

- East Gordon Street bridge rehabilitation and upgrade.
- Sarina Active Towns shared path construction (Railway Square to Anzac Street).

### Landscape Issues

- Pending detail design for Bluewater Trail (BWT) sections – Bluewater Quay (BWQ) to River Street Boat Ramp – Stages 2 & 3 – due to funding availability these will have to be delivered via CWP at a later stage. Design development to commence first quarter 2015.
- Disabled Access (DA) Audit priority listing for 2015/16 rectification projects (Mackay-wide) completed; design of bus stop compliance projects commenced; Holland Road bus stop completed.
- Disability Discrimination Act Audit 2014/2015 Township Cemeteries and Amenity Facilities - Final Report delivered December 2014.
- Landscape concept plan for Shoal Point Reservoir (Mackay Water) revised and delivered.
- Finalising update of 8300 Supplementary Specification. Liaising with Parks to review and revise irrigation master specification.
- Updates to Style Manual ongoing – draft anticipated June 2015.
- Ongoing contract administration advice and services on CCRP.

- Progressed cost estimate rates for landscape items for inclusion into MRC cost estimates system.
- Completion of Revegetation Plans for Bee Creek Replacement Project.
- Completion of Landscape Plans for Paradise Street /Evans Street upgrade.
- Botanic Gardens carpark upgrade concept plans finalized; pending discussions with Mackay Regional Botanic Gardens Curator prior to finalisation.
- Jubilee Park Upgrade:
  - Stage 1 civil works completed; flagpoles & lighting to be installed Feb 2015; gardens and artwork installed March/April 2015.
  - Ultimate design, staging proposal, and estimates complete.
  - Stage 2 design and estimate 95% complete.
  - ANZAC artwork – Stage 1 artwork currently being manufactured; liaising with Mackay Heritage Committee in development of Stage 2 artwork.

## Traffic and Investigation Issues

### Active Towns Program:

- Planning has continued for Bike Week 2015. The program will include 'Cyclefest Mackay', an expo showcasing all things cycling. Branding and sponsorship opportunities are currently being drafted.
- The 'Gooseponds Walk' brochure has been drafted which includes a map and details on facilities available. The pathway has already received an 'Inclusive Community Champion' Award from Spinal Injuries Australia.
- Program for bicycle education in 2015 is currently being drafted. This will include regular school holiday programs as well as offering courses for adults to build confidence when riding. These courses will be facilitated by PCYC.
- Rides of the Region – Final version of the brochure being printed. Brochure to be distributed through MRC customer service, Mackay Tourism, local bike shops and local gyms.
- Attendance at Active Towns meeting on 28 November 2014 meeting with the DTMR and the other Active Towns council representatives to share ideas and possible activities.
- In conjunction with the CQ Sporty Schools program, a survey on Active School Travel and Physical Activity behaviours closed on Friday, 7 November 2014. The survey received 340 responses. The data is currently being analysed and will help to create an active school travel program to be rolled out in the new school year.
- Met with Ron Steel, a local community member who has advised interest in helping to start a Bike Bus program at some of the schools in the Mackay region. Planning for this will commence when school resumes in 2015.

### Traffic Counts:

- Installed traffic counters for boat ramp survey over Christmas period.
- Maintain count program for Capital Works Program.

### Works On Roads – Ongoing projects:

- Ergon Energy - Milton Street – request for amended cable route for 33kV power supply.
- ISGM – National – 19 Campbells Ridge Road Balberra – No action.
- ISGM National – 1397 Midge Point Road, Midge Point - Routine site-inspection has revealed that the work had already been completed without Council approval nor traffic management permits. From discussions with ISGM, they are now instructing contractors to make contact with Council prior to commencement of work.
- Ergon Energy – Gravinos Road Victoria Plains – design issues complete – guardrail installation design being undertaken.
- Ergon – 3 Creese Street Beaconsfield - relocate water supply within Road Reserve to correct alignment to allow Ergon installation.

## **Works on Roads Inspections**

### Ergon, Telstra and other Utility Provider Inspections

51 worksites have been inspected for December, one of these have defects and will be issued with defect notices to be repaired within a 30 day time frame. Remainder will be issued with letter indicating commencement of 6 months warranty period.

Inspection will be performed when Ergon has notified the Works On Road Officer of defect completion, then if works are repaired to council's requirements then a letter for 6 month warranty will be issued.

### **Customer Requests.**

- 45 Works on Roads Requests totalling 32 hour processing time.
- 7 Works on Roads Inspections totalling 10.25 hour processing time.
- 17 Q100 Requests totalling 14 hour processing time.
- 62 Plan Searches (GPLANS) totalling 31.5 hour processing time.
- 240 Excess Dimension and Excess Mass Approvals totalling 40 hour processing time.
- 17 Temporary Road Closure Approvals totalling 9 hour processing time.

# EMERGENCY MANAGEMENT

## Overview

### Community Education

- Eimeo State Primary School – Disaster Management and Preparedness presentation to Grade 6.
- Older Women’s Network – Emergency Action Guide update presentation.
- Central Queensland University – Level 1, 2 and 3 English classes, Disaster Management Preparedness presentation.
- Eaglemount Retirement Resort – Emergency Planning and Storm Season Preparedness presentation.
- Planning commenced for the Seaforth Community Information Day to be held in February.

### Exercises

- LDMG Exercise (Exercise Brushwing) conducted Monday 8 December 2015.

### Operations

- No significant operations during this reporting period. Emergency Management staff monitoring fires in the Central district as per QFES intelligence briefs.

### Planning - Mackay Local Disaster Management Plan and Operational Plans

- Continuing reviews with Inspector General Emergency Management (IGEM) and internally in council on various Disaster Management Sub Plans.
- Work continuing with Mackay Water in the further development of the Middle Creek Emergency Action Plan.
- MRC emergency management sub plans are being provided to IGEM as best practice documents to assist other Local Governments develop their sub plans further.

### Projects / Mitigation Strategies

- Public access sand stockpile directions and “use signs” have been installed on the four (4) public access sites – Sarina (Brewers Road), Norris Road (before PCYC), Stadium (over flow car park) and Shakespeare Street (near Army Cadets).
- New emergency beach access constructed at Illawong Beach to assist emergency services accessing the beach area in the event of an aircraft accident.
- Emergency Backup Generators Project – phase 3 and 1 changeover switches have been installed on both generators (Eungella and Midge Point). Staff, SES and community members will need to be inducted on the use, safety conditions before they can operate generators.
- LDMG Meeting conducted Monday 8 December 2014.
- Special Needs working group continuing work with special needs groups in the Mackay Region.
- SES ICT Function Requirements Implementation – 1<sup>st</sup> year rollout has commenced.
- Coastal Hazards Adaption Study; Stage 1A completed. Stage 1B will be completed by April 2015. Gathering of information is currently being undertaken.
- CBD Flood study; survey currently being undertaken. Completion by April 2015.
- Eungella; a hard stand to be constructed for the new generator when it is being used.
- Testing of the Tiger Dam barrier was conducted. This barrier is placed across Harbour Road.



### Emergency Management Capital Projects & Facility Upgrades

- Sarina SES Facility; 99% complete, waiting on the final building certificate.
- Finch Hatton SES Facility; door locks to be changed to the SES Master Key System. Minor levelling of soil to be completed around shed by Civil Operations.

- Calen Joint Facility: construction of footpath between carpark and building still needs to be completed. MOU still being drafted.
- North Mackay Levee – completed.

### General

- Disaster Management Training conducted: Queensland Disaster Management Arrangements (QDMA), Recovery Modules 1, 2 and 3, Disaster Management Planning 1, Disaster Coordination Training Module 1 and Cyclone Shelter Training.
- Civil Operations Emergency Management Preparedness and Emergency Sub Plan presentations x 3 (Sarina, Paget and Mirani).
- Five (5) staff members continuing their studies - Advanced Diploma of Public Safety (Emergency Management).
- Inspection of the Cyclone Shelter conducted 15 December 2014 to ensure facility was ready to go for the Christmas period.

### State Emergency Services

#### Overview

#### Local Controller

Nil

#### Activations for the month

##### Flood Boat Search and Rescue/Recovery

15<sup>th</sup> – 19<sup>th</sup> November 2014

Flood Boats deployed from Mirani and Mackay to search for a missing person at Eungella Dam.

16<sup>th</sup> – 20<sup>th</sup> December 2014

Flood Boats deployed from Sarina and Mackay to search for a missing person at Notch Point South of Koumala.

28<sup>th</sup> December 2014

One Flood Boat deployed from Mackay to McCreadys Creek to assist Police in the inspection of a vehicle observed in the water.

##### Agency Support

7<sup>th</sup> December 2014

Activated by QPS to assist with lighting at the scene of a fatal traffic incident.

10<sup>th</sup> December 2014

Activated by QFES to assist in evacuation management at Meatworks Bakers Creek.

13<sup>th</sup> – 14<sup>th</sup> December 2014

Activated by QPS for Forensic search.

### Storm Response

4<sup>th</sup> December 2014

Five volunteers deployed to Brisbane to assist local crews in storm response operations.

26<sup>th</sup> December

Sarina Group responded to several requests for assistance as a result of a minor rain event.

6<sup>th</sup> January 2015

Mackay Group responded to several jobs as a result of a minor rain event.

### Public Safety/Community Education

15th -24th December 2014

Volunteers completed 608 hours of wrapping presents for ESA Alpha Rho raising \$15,000.00.

4th and 15th December 2015

Volunteers held sausage sizzles at Bunnings.

### Major Training Events

#### MRU Training and Community Hours

	Operations	Training	Administration	Maintenance	Community Education	Total
<b>Multiple Group Response</b>	442		360	103	608	1513
<b>Midge Point</b>		18	3	3		24
<b>Calen</b>	11	27	2	3		43
<b>Mackay</b>	24	705	20	20	12	781
<b>Mirani</b>	6	75	12	6		99
<b>Sarina</b>	12	102	30	114		258
<b>Campwin</b>		35	2	2		39
<b>Armstrong</b>		15	1	2		18
<b>Koumala</b>		26	1	2		29
<b>Total</b>	495	1003	431	255	620	2804



## QUALITY ASSURANCE

2013/2014	Dec 2013	Jan 2014	Feb 2014	Mar 2014	April 2014	May 2014	June 2014	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014
<b>No. of Completed Client Requests Surveyed for Satisfaction Levels*</b>	291	342	327	463	293	556	331	321	363	277	260	392	284
<b>No. of Completed Construction Projects Surveyed for Satisfaction Levels</b>	0	0	0	0	1	0	2	1	0	0	1	0	0
<b>No. of Client Satisfaction Survey Results Finalised</b>	0	0	2	0	3	0	3	1	3	3	0	0	3
<b>No. of IMS Documents Reviewed and Updated</b>	4	0	4	6	4	3	4	4	0	6	1	5	15
<b>No. of New IMS Documents Commenced</b>	3	2	3	1	1	0	2	1	3	0	0	3	1
<b>No. of Work Site Visits</b>	8	8	20	18	15	16	5	7	3	5	1	1	3
<b>No. of Internal Quality Audits Conducted</b>	1	0	1	1	2	2	2	2	1	0	2	0	0
<b>No. of Staff Training Sessions Conducted</b>	Nil	Nil	1	1	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

\*Includes surveys undertaken for Water and Waste Services.

\*\*January figures not included as surveys are not sent out until the first of January.

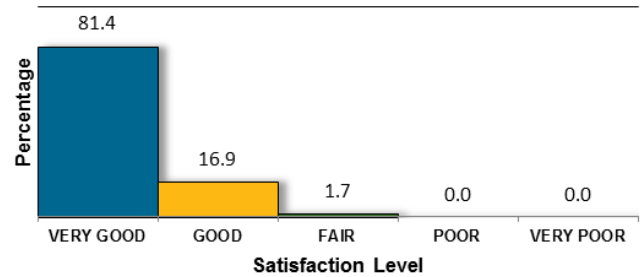
## REQUESTS FOR MAINTENANCE WORK Results of Survey (September / October 2014)

### Water & Waste Services

Attitude of staff receiving request



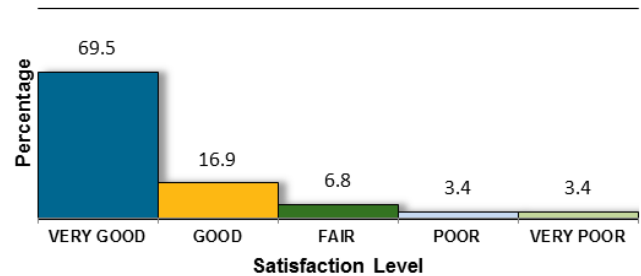
Attitude of staff attending request



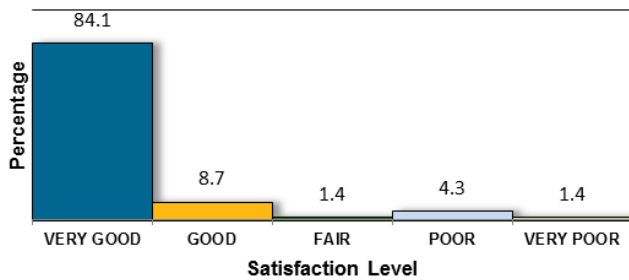
Time taken to address request



Appearance of completed work



Degree work addresses request



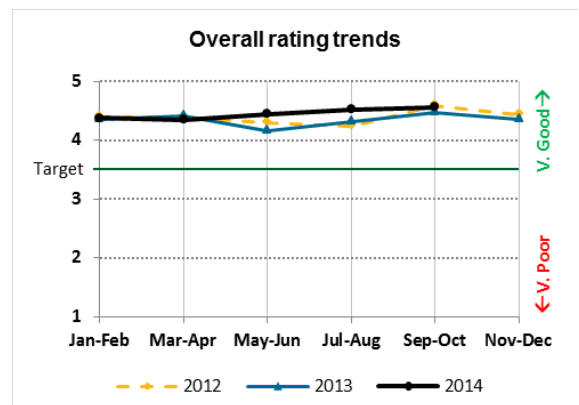
Overall satisfaction with response



#### Representative Comments

- Attended to the problem quickly. Could not have asked for better service.
- Very good.
- Same day service.
- Very neat, tidy and levelled out.
- Great job.
- Rather untidy looking.
- Excellent. 100% done to my request.
- Holes were filled a week later with crusher gravel when sand filling was requested.
- Who is running this show? Well done.
- Really good, excellent service.
- Very prompt and efficient. Good work MRC

#### Trends



## REQUESTS FOR MAINTENANCE WORK

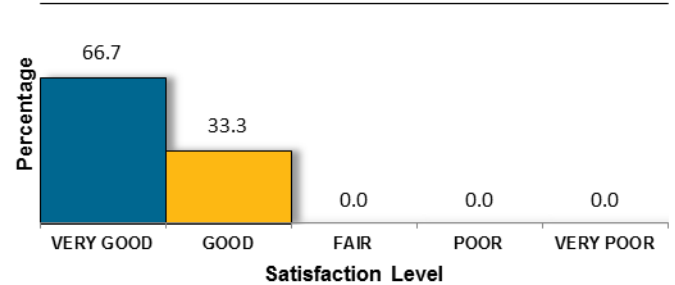
### Results of Survey (September / October 2014)

#### Civil Operations

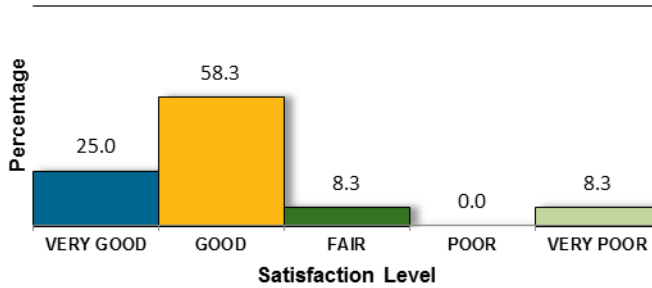
**Attitude of staff receiving request**



**Attitude of staff attending request**



**Time taken to address request**



**Appearance of completed work**



**Degree work addresses request**



**Overall satisfaction with response**



#### Representative Comments

- Helpful and friendly.
- Almost 2 months. Called Council 28/07/14. Job done 20/09/2014.
- Drain mowed ready for wet season.
- Very good, never made request before.
- No work done.
- First bit of maintenance on this road for over a year. It used to get done twice a year without fail. I found out when I phoned about it, that it's not even on the regular maintenance schedule.

#### Trends

