

Report No:	RESC11-04				
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Date:	14 June 2011				
Information Only – no decision					
required					

# **REPORT SUMMARY**

Subject:	UTILITIES REPORT
Report Author	Jeff Cuthbertson, Utilities Asset Manager
Meeting Date:	23 June 2011
Report to:	Engineering Services Committee

# EXECUTIVE SUMMARY

This report provides a summary of the Utilities activities for the period April-May 2011.

Overall the Utilities contractor Downer is meeting performance targets for stormwater, wastewater and water operations and maintenance activities, and expenditure is on track. The majority of stormwater, wastewater and water networks have performed well during the last period.

In solid waste, kerbside collections and Resource Recovery Centres continue to perform well. Waste volumes to Eves Valley landfill have continued to decline, and staff are currently considering budget implications if these reductions continue.

Utilities capital projects are steadily progressing and are generally on track. Tenders that have been awarded recently are described near the end of this report.

# **RECOMMENDATION/S**

That the report be received.

# DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Utilities Report, RESC11-06-04.



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# 1. UTILITIES GENERAL

# **1.1 Utilities Operations and Maintenance Contract**

- 1.2 Downer undertook all proactive, routine and non-routine network maintenance on the water and wastewater treatment plants, pump stations, reservoir sites and stormwater assets as scheduled and required within their March/April 2011 programme.
- 1.3 As required by Contract 688, MWH undertook a random selection of audits on various portions of the water, wastewater and stormwater networks, and the most recent audit results are all in compliance with contract requirements.

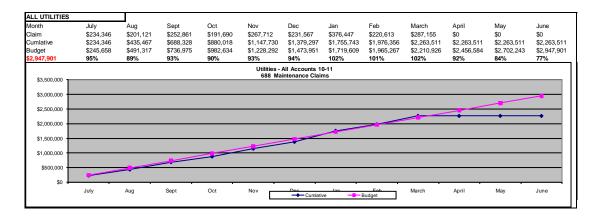
#### 1.4 Customer Services - Job Completion

1.5 Targets and requirements under Contract 688 are for the contractor to achieve 90% or above for completion of allocated jobs on time. The contractor managed to achieve 93% for March 2011, and continued to improve on this in April with a score of 95%.

#### **1.6 Financial Performance**

1.7 As shown in the graph below, the overall Utilities expenditure currently at 102% as of the end of March 2011, is tracking very close to the estimated budget. It is expected this will even out and marginally drop below the budget target line again in the remaining months of the financial year.





# 1.8 General Items

- 1.9 Leak detection work has been completed in Motueka and Collingwood and an instruction issued for the repair of leaks found. The repair of leaks found in Wakefield, has been completed.
- 1.10 The debris nets installed at the stormwater pipe outlets of Beach Road, Richmond continue to be monitored regularly. A small volume of inorganic debris has been removed along with approximately 2m<sup>3</sup> of organic matter.
- 1.11 An assessment of alternative chemical dosing options is to be carried out for the Pohara-Takaka sewer network. This is to allow a comparison of costs and effectiveness between different dosing agents.

# 2. WASTEWATER NETWORKS

#### 2.1 **Operations and Maintenance**

- 2.2 The vast majority of the wastewater networks have performed well.
- 2.3 During this period environmental and performance monitoring was routinely undertaken at all Tasman District Council operated Wastewater Treatment Plants (WWTPs).
- 2.4 Table 1 in Appendix 1, indicates whether full compliance with resource consent conditions was achieved at each WWTP. Where full compliance was not achieved, the likely factors contributing to the non-compliance event are discussed.
- 2.5 Wastewater exceptions and Sewer Blockages/Overflows for the last period are detailed in Appendix 2: Wastewater Exceptions and Sewer Blockages/Overflows.



# 2.6 Capital Projects

- 2.7 Sewer renewals contracts for Richmond and Motueka that were to be tendered prior to end of June 2011 are to be delayed due to potential construction issues related to high seasonal groundwater.
- 2.8 The Murchison Wastewater Pumpstation upgrade contract is out to tender with the positive outcome to the Waller Street pumpstation site land negotiations.
- 2.9 The Pohara Sewer Gravity Main upgrade contract is due to be tendered this month.
- 2.10 Mapua Wharf Wastewater Pump Station Upgrade The Request for Qualifications closed on 1 June 2011. Four submissions were received and are undergoing evaluation. The detailed design is progressing in conjunction with obtaining resource consents. It is anticipated the tender will be let in July 2011.
- 2.11 Contract 816 (Motueka Stormwater Improvements High Street) has been awarded to Ching Contracting Ltd and work is underway. The works include replacement of some sewer mains in High Street (between Poole and Inglis Streets) and in Eginton and Fearon Streets.

# 3. WATER NETWORKS

# 3.1 Operations and Maintenance

- 3.2 The majority of the urban water supply networks have performed well over the March/April period. Regular rainfall events have relieved the demand on the networks, in particular, the rural systems.
- 3.3 The chlorinator at the Pohara WTP was overhauled in April in line with the contractors maintenance programme.
- 3.4 In Richmond at the Champion Road Reservoir, new valve junctions were installed in preparation for the new pumpstation and link to Richmond East High Level Reservoir. The concrete valve chambers have been completed and electrical cabling and ducting installed.
- 3.5 New Water Connections Summary:
  - one in Brightwater
  - six in Richmond
  - One each in Motueka, Murchison and Tapawera.
- 3.6 For water exceptions, refer to Appendix 3: Water Exceptions

# 3.7 Capital Projects

3.8 Queen Street and Valhalla Reservoirs – Consultation has been undertaken and investigation is underway for the installation of seismic control valving on the



Richmond trunk main near the Upper Queen Street reservoir and also Valhalla reservoirs.

- 3.9 The Tapawera Rising Main Replacement contract continues to progress toward completion. The remaining work involves cut-overs to connect to new mains and all work is expected to be completed by the end of June 2011.
- 3.10 Land negotiations for the Richmond East Reservoir and pipework have continued and with positive outcomes. Alternative access options have been investigated and appear favourable. Resource consents and detailed reservoir design are underway.
- 3.11 The construction of the Takaka CBD Firefighting Water Scheme is nearing completion and final commissioning of the system involving the Fire Service has been completed successfully. The contract has now reached Practical Completion.
- 3.12 Water consent renewals for Waimea and Redwoods have been submitted in accordance with the requirements of the Tasman Resource Management Plan, and have gained draft approval. Staff are reviewing the draft conditions prior to final issue of consent.

# 4. STORMWATER NETWORKS

# 4.1 Operations and Maintenance

- 4.2 Precautionary storm checks were undertaken during the 15–18 April rainfall event which again resulted in more significant rainfall in the Golden Bay.
- 4.3 The Motueka Wharf Road flood gates were closed intermittently between 19 and 24 March due to abnormally high tides.
- 4.4 Routine maintenance undertaken on drains throughout the region has been to an acceptable standard.
- 4.5 Investigations were undertaken into pipework that was backing up and causing flooding on State Highway 6 in Wakefield (near the corner of Whitby and Pitfure Roads). The pipework was found to be undersized and have considerable debris/root build up which has since been cleared. It is likely that the drain will continue to block and it is under investigation for upsizing.

# 4.6 Capital Projects

- 4.7 Richmond Stormwater (Reservoir Creek Dam) Landowner negotiations continue for this project while a winter monitoring programme is being implemented in the interim.
- 4.8 Ruby Bay Stormwater (Tait Street and Stafford Drive) Tenders for these works close on Wednesday 15 June, with award expected prior to 30 June. The



works include three separable portions, including a new outfall at Tait Street, a low pressure stormwater line from Crusader Drive to Tait Street and drainage improvements on Stafford Drive.

4.9 Motueka Stormwater Upgrade (High Street) – This tender was awarded to Ching Contracting Ltd and work is underway for construction of a new stormwater main between Poole Street and Parker Street.

# 5. TELEMETRY

- 5.1 Analogue telemetry The network has performed well over this reporting period and there are no significant issues or anomalies to report.
- 5.2 Base Station SCADA Server A process is now in place to detect incorrect or inaccurate data and these issues are documented and followed up with the necessary remedial work. A significant change to how users access the system has been implemented and there is now more control improving the security of the server and the software.
- 5.3 Because no measurable fault could be found with the Collingwood Repeater Station a new solution is being investigated which involves another high level repeater site in the Pohara area. It is anticipated that this site will alleviate the communication issues between Takaka and Collingwood as well as getting telemetry to Pohara and the neighbouring stations there.
- 5.4 New sites have been added to the system. Valhalla Drive High Level Reservoir site has been upgraded to a repeater site and replaces the one at Council's Richmond office. A new high speed micro-link system is now connecting Valhalla Drive High Level Reservoir with the Richmond office building. The system is online and running.
- 5.5 Murchison received a new Back Bone station. To ensure adequate backup, Council staff will look into a bigger UPS system in order to keep the modem and radio online for at least four hours.

# 6. SOLID WASTE

# 6.1 Kerbside recycling and bag collection

- 6.2 Kerbside collections are continuing well, with a sustained high level of performance by the contractor.
- 6.3 Supply of an additional 60 litre rubbish bag has commenced, with bags available for purchase at Council offices in June and at retail outlets from July.



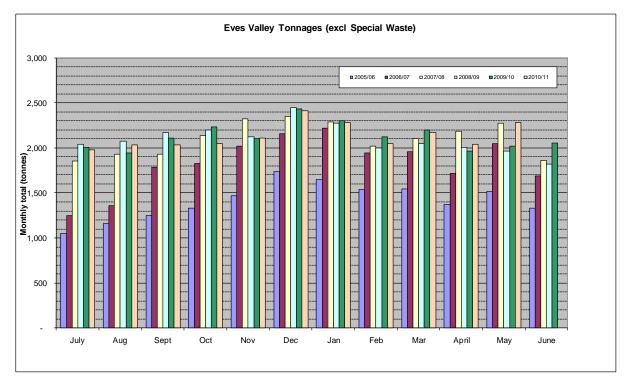
#### 6.4 Resource Recovery Centres

- 6.5 Good progress is being made in the redevelopment of the Richmond Resource Recovery Centre (Contract 814), with the new Fittal Street entrance open to traffic from Wednesday 8 June. Unfavourable ground conditions and wet weather in May has affected some work but a proactive approach by the contractor (Fulton Hogan) has minimised delays.
- 6.6 New recycling facilities, kiosk and weighbridge are largely complete, with work now moving to reconstruction of the waste tipping pit and replacement of the waste compactor. Supply of the waste compactor and bins (Contract 811) is progressing well, with installation programmed for July.
- 6.7 Preliminary design for the Mariri Resource Recovery Centre is now largely complete, with a revised layout and improved recycling and greenwaste facilities included. Options for the loading of waste from this site are currently being considered, including the refurbishment of the Richmond RRC compactor.
- 6.8 Site development plans are currently being detailed for each of the remaining RRC sites (Takaka, Collingwood, Murchison) in advance of any significant capital works. Staff, in a separate paper on this agenda, are recommending reallocation of some funding from these sites to enable the completion of the Richmond RRC on an accelerated programme. Capital works at Mariri and these smaller sites are proposed in the coming financial year, and it is expected that some surplus funding for the Richmond RRC will be reallocated to these sites.

# 6.9 Eves Valley Landfill

- 6.10 Waste volumes to the Eves Valley landfill increased in April and May with tonnages from RRC sites increasing 4% and 13% respectively when compare with the previous year. Special waste volumes for the two months were also up significantly, but the increased tonnages were substantially due to development of the Richmond RRC and removal of unsuitable material from the site.
- 6.11 While the recent increases in tonnages are pleasing from a revenue perspective, they are unlikely to close the operating deficit for the current year.



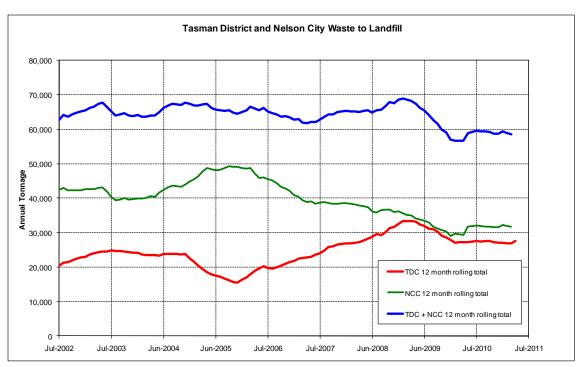


- 6.12 Improvements to stormwater control commenced in May, with hydroseeding of significant areas of the landfill site. Further work, including improvements to the stormwater ponds and diversion of clean water away from the operational site, will commence in June.
- 6.13 Recent heavy rainfall has caused significant increases in leachate from the landfill, requiring additional monitoring and some supplementary transport of leachate by road. Additional flows may also be causing some odour problems in Brightwater. Staff are working with the contractor to identify operational improvements to reduce flows, and capital work scheduled for next year is expected to improve leachate management.

# 6.14 Regional Waste Minimisation

6.15 Regional waste quantities indicate a generally small recovery in waste volumes to landfill. The increase in Tasman waste is a one-off increase due to disposal of waste from the Richmond RRC site development.





6.16 An invitation for Expressions of Interest is currently being developed with Nelson City Council, for waste education services. Responses to the document will assist in the procurement strategy for this service later in the year.

# 7. TENDERS

7.1 The following tenders have been awarded since the previous Engineering Services Committee meeting:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	Council estimate	Budget for this item	Comment
816	High Street, Motueka Stormwater and Wastewater upgrade	2	Ching Contracting	\$1,056,392	\$1,197,974	\$896,375	\$1,038,695	Construction will be over two financial years.

# 8. **RECOMMENDATION**

8.1 That the report be received.

# 9. DRAFT RESOLUTION

# THAT the Engineering Services Committee receives the Utilities Report RESC11-06-04.

# Appendices:

Appendix 1: Table 1 WWTP Compliance with Consent Conditions

Appendix 2: Wastewater Exceptions and Sewer Blockages/Overflows

Appendix 3: Water Exceptions