

Report No:	RESC11-04-05
File No:	
Date:	15 April 2011
<b><i>Information Only – no decision required</i></b>	

## REPORT SUMMARY

**Report to:** Chair and Members, Engineering Services Committee  
**Meeting Date:** 28 April 2011  
**Subject:** Utilities Report  
**Report Author:** Jeff Cuthbertson, Utilities Asset Engineer

### EXECUTIVE SUMMARY

This report provides the committee a summary of the Utilities activities for the period February-March 2011.

Overall the Utilities contractor Downer is meeting performance targets for stormwater, wastewater and water 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. No Utilities tenders have been awarded recently.

### RECOMMENDATION/S

**That the report be received.**

### DRAFT RESOLUTION

**THAT the Engineering Services Committee receives the Utilities Report, RESC11-04-05.**

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## **1. UTILITIES GENERAL**

### **1.1 Utilities Operations and Maintenance Contract**

1.2 Downer undertook all pro-active, routine and non-routine network maintenance on the water/wastewater treatment plants, pump stations, reservoir sites and stormwater assets as scheduled and required within their January/February 2011 programme.

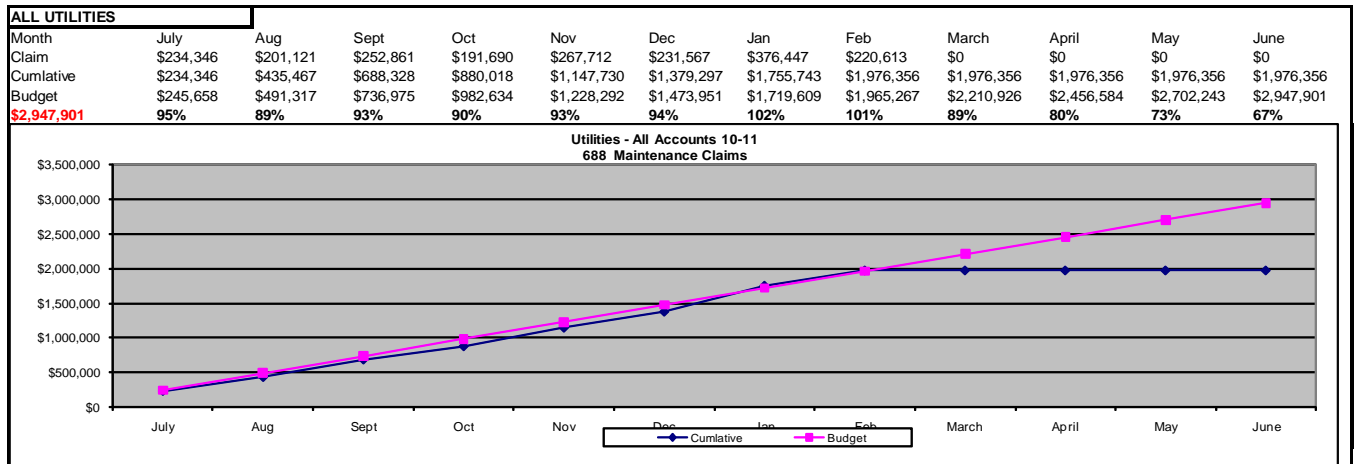
1.3 As required by Contract 688, MWH undertook a random selection of audits on various portions of the water, wastewater and stormwater networks, and the most recent audit results are all in compliance with contract requirements.

### **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 the desired 90% criteria for February 2011, and with attention focused in this area an improvement over the March reporting period resulted in a score of 93%.

### **1.6 Financial Performance**

1.7 The overall Utilities expenditure is currently tracking at a very close 101% of estimated budget, as of the end of February 2011. This increase in costs over the recent months is primarily due to extensive pro-active maintenance around the holiday period and cost fluctuations from July to December 2010 being applied. 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 The leak detection programme continues on water schemes in Wakefield, Motueka and Collingwood. This enables total scheme water usage assessments and remedial repair works to be carried out to improve overall performance. Unfortunately due to the extensive damage to the Christchurch utility network the leak detection specialist contractor has been delayed on their programme of work for the Tasman area.
- 1.10 A review of the pricing structure and timing around contract variation price requests has been undertaken.
- 1.11 A review of the current stormwater regular inspection regimes has been undertaken to ensure recent additions of assets are captured.

## 2. WASTEWATER NETWORKS

### 2.1 Operations and Maintenance

- 2.2 The vast majority of the wastewater networks have performed well. This is in spite of warm dry weather, which resulted in longer retention times and higher temperatures within the system. Chemical dosing of the Takaka / Pohara network, in conjunction with the installation of carbon filter units at Burnside and Sunbelt pump stations, has made a significant improvement to the control of H<sub>2</sub>S levels. The result was that odour issues and complaints on this network have been minimal.
- 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 are to be tendered prior to June 2011.
- 2.8 The Murchison sewer renewals contract is ready to go out to tender, and just awaits the outcome of the Waller Street pump station site land negotiations.
- 2.9 The Pohara Sewer Gravity Main upgrade contract is in its final design phase and is due to be tendered this month.
- 2.10 Mapua Wharf Wastewater Pump Station Upgrade – The detailed design is underway for this project in conjunction with obtaining the appropriate resource consents. It is anticipated that the tender will be let in June 2011.
- 2.11 Tenders for Contract 816 (Motueka Stormwater Improvements - High Street) closed on 9 March. The works will include replacement of some sewer mains in High Street (between Poole and Parker Streets) and in Eginton Street. A preferred tenderer has been identified and works are expected to commence in May.

### **3. WATER NETWORKS**

#### **3.1 Operations and Maintenance**

- 3.2 The majority of the urban water supply networks have performed well over the January and February periods despite the fact the dry weather has added extra demand on the networks. The rural systems have also performed adequately and aside from expected low flow issues at Dovedale and Eighty Eight Valley intakes, there has, in general been an improvement in the network performance in comparison to previous years. Options for improvements to the Pohara

intake structure have been investigated and are being priced; this will improve the quality of the raw water entering the treatment plant.

- 3.3 In the Dovedale supply, an upgraded new line meter was installed on the 80mm main on Neudorf Saddle.
- 3.4 In Richmond, at the Champion Road / Hill Street intersection, mains and valve junctions were upgraded in conjunction with the Waimeha subdivision work. This upgrade links the Richmond High Level 150mm main in Hill Street to the new 250mm main in Champion Road and will improve the water flows to the Park Drive area and form part of the new Richmond East reticulation network.
- 3.5 New Water Connections Summary:
  - Two in Brightwater
  - Four in Richmond including a rural connection
  - One each Eighty Eight Valley Road, Collingwood, Mapua, Kaiteriteri and Murchison.
- 3.6 For water exceptions, refer to Appendix 3: Water Exceptions

### **3.7 Capital Projects**

- 3.8 Queen Street and Valhalla Reservoirs – Planning and design 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 make progress. The work is expected to be completed by the end of April 2011.
- 3.10 Land negotiations for the Richmond East Reservoir and Pipework have continued and are showing some progress. Resource consents and detailed reservoir design are underway.
- 3.11 Land negotiations for the Richmond South Reservoir are ongoing, and following agreement in principle can be reached to enable valuations to be progressed.
- 3.12 The construction of the Takaka CBD Firefighting Water Scheme is nearing completion. All the pipe laying work is complete. Outstanding work includes the installation of mechanical and electrical components at the source and testing and commissioning of the system.
- 3.13 Richmond Water Treatment Plant – detailed design and investigation is underway including survey and geotechnical work. The Richmond and Waimea Public Health Risk Management Plans have been submitted to the Ministry of Health for approval.

- 3.14 Water consent renewals for Waimea and Redwoods have been submitted in accordance with the requirements of the Tasman Resource Management Plan.
- 3.15 Motueka Water Supply Subsidy Application – Following the Motueka Community Board’s unanimous support of Council’s proposal to apply for the Ministry of Health Drinking Water Subsidy, the application was submitted to the Ministry of Health. The Community Board has since resolved to set up a working party which will be involved in the process of determining next steps for the Motueka town supply, in either case if the subsidy application is or is not successful.

## **4. STORMWATER NETWORKS**

### **4.1 Operations and Maintenance**

- 4.2 Precautionary storm checks were undertaken on three occasions during the reporting period, 1 January to 25 March. Significant rainfall events were recorded on 18 January, and a prolonged rainfall event over 5-6 days occurred at the beginning of March.
- 4.3 The Motueka Wharf Road flood gates were closed as a result of the rainfall event on 18 January, and also 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 Additional clearance of a section of Reservoir Creek (adjacent to the ASB Aquatic Centre) is now complete. This section of creek was becoming overgrown with Cracked Willow, and also contained a number of large old stumps and abandoned concrete pipework, which in storm events was diverting flow and causing undermining of some areas of the stream bank.

### **4.6 Capital Projects**

- 4.7 Richmond Stormwater (Reservoir Creek Dam) – A resource consent for this work has been granted. Detailed design and tender documents are essentially complete, awaiting only landowner negotiations. A winter monitoring programme is being developed, in the expectation that works will not commence in the short term.
- 4.8 Ruby Bay Stormwater (Tait Street and Stafford Drive) – Discussions with four land owners are in progress for works on private property, with good progress

being made. Detailed design for this work is in progress, with tenders expected to be advertised in early May.

4.9 Mapua Stormwater (Seaton Valley Stream) – Work on a third new culvert on the Seaton Valley Stream (Contract 799) is complete.

4.10 Further stream widening works are programmed for the coming year and will be subject to ongoing landowner negotiations. Staff will also be liaising with Community Services staff for progress on local walkways.



*Recently installed culvert on Seaton Valley Stream*

4.11 Motueka Stormwater Upgrade (High Street) – Tenders for construction of a new stormwater main between Poole Street and Parker Street (Contract 816) closed on 9 March. The works are expected to commence in late May and will include selected wastewater sewer renewals.

## **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. The contractor is upskilling their staff, to ensure they can deal with and rectify these problems quickly and efficiently.

- 5.3 Digital Telemetry Network - Some minor operational changes are being implemented in Collingwood and Kaiteriteri that have resulted in significant improvements in network performance with interruptions/outages now at a minimal acceptable level. Additional remedial works are planned at Kaiteriteri to trim back trees surrounding the site of the sewer vessel to further improve performance on this network.
- 5.4 A gap analysis is proposed to improve the integration between all the telemetry users and operators to ensure each site is fit for purpose. This will ensure that any potential cost savings can be achieved by maximising the efficiency of the operations where required, while also ensuring correct compliance data is obtained and maintained for consenting requirements.

## 6. SOLID WASTE

### 6.1 Kerbside recycling and bag collection

- 6.2 Kerbside collections are continuing well, with colour sorting of glass now fully implemented across all areas. The first shipment of colour sorted glass to Auckland occurred in late March and was successful. Glass is now shipped weekly to Auckland, with typically two containers leaving the site each week.



- 6.3 Earthquake damage to manufacturing facilities in Christchurch led to some minor disruption to rubbish bag supply, but this has now been resolved.
- 6.2 An extension of time to Contract 613 to 30 September 2012 has been granted to Smart Environmental for kerbside collections and Resource Recovery Centres.



### 6.3 Resource Recovery Centres

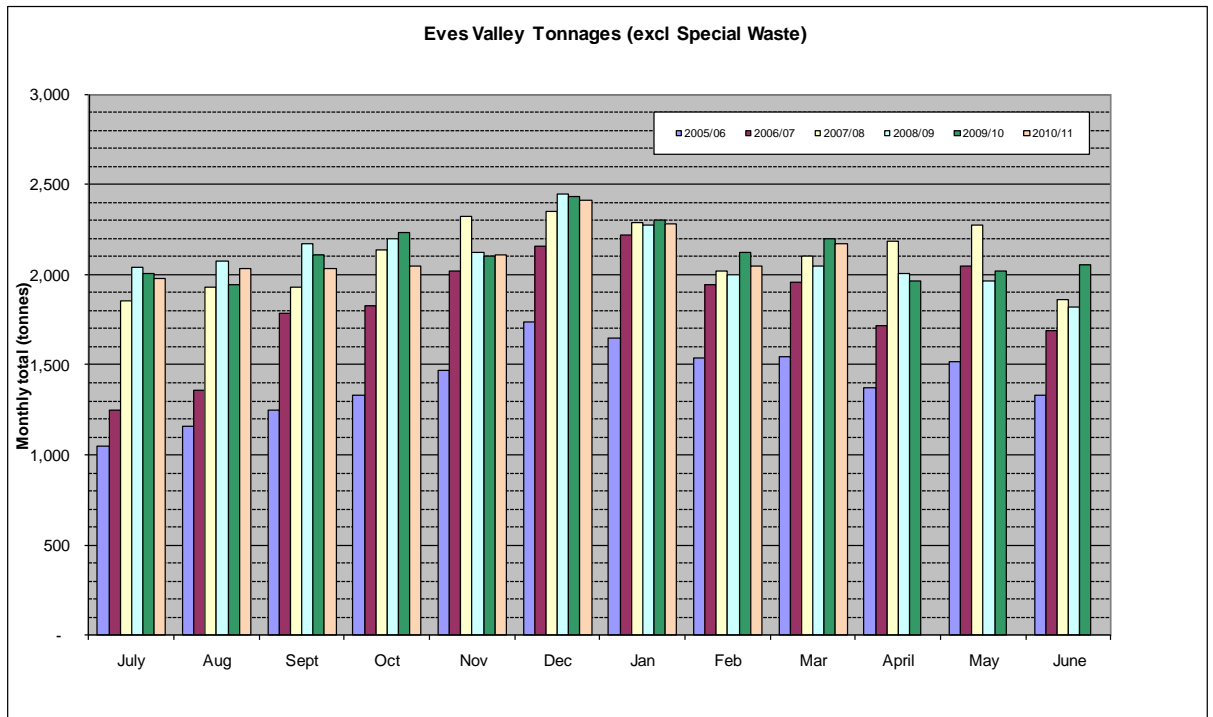
6.4 On 28 February two tenders were awarded for a significant upgrade of the Richmond Resource Recovery Centre (Contract 814) and for a new waste compactor and replacement bins (Contract 811). Works are progressing well with the contractor, Fulton Hogan, making good progress. Road and carpark construction is partially complete, with the new entrance to the site expected to open in early June. Staff are investigating options to accelerate this work.

6.5 The Kahurangi Employment Trust relocated the reuse shop to Fittall Street in late March and demolition of the old facilities commenced on 1 April.

6.5 Detailed design has commenced for improvements for the Mariri Resource Recovery Centre following on from work at the Richmond site. Prioritisation of resources to the Richmond works mean that some delays have occurred. This work is likely to now commence in June of this year.

### 6.6 Eves Valley Landfill

6.7 Waste volumes to Eves Valley landfill remained lower than budgeted for the third quarter. While volumes from Resource Recovery Centres recovered slightly, special waste volumes continued to be lower than expected for the year (when excluding waste generated during Richmond RRC works). Staff are currently considering budget implications of this reduction.

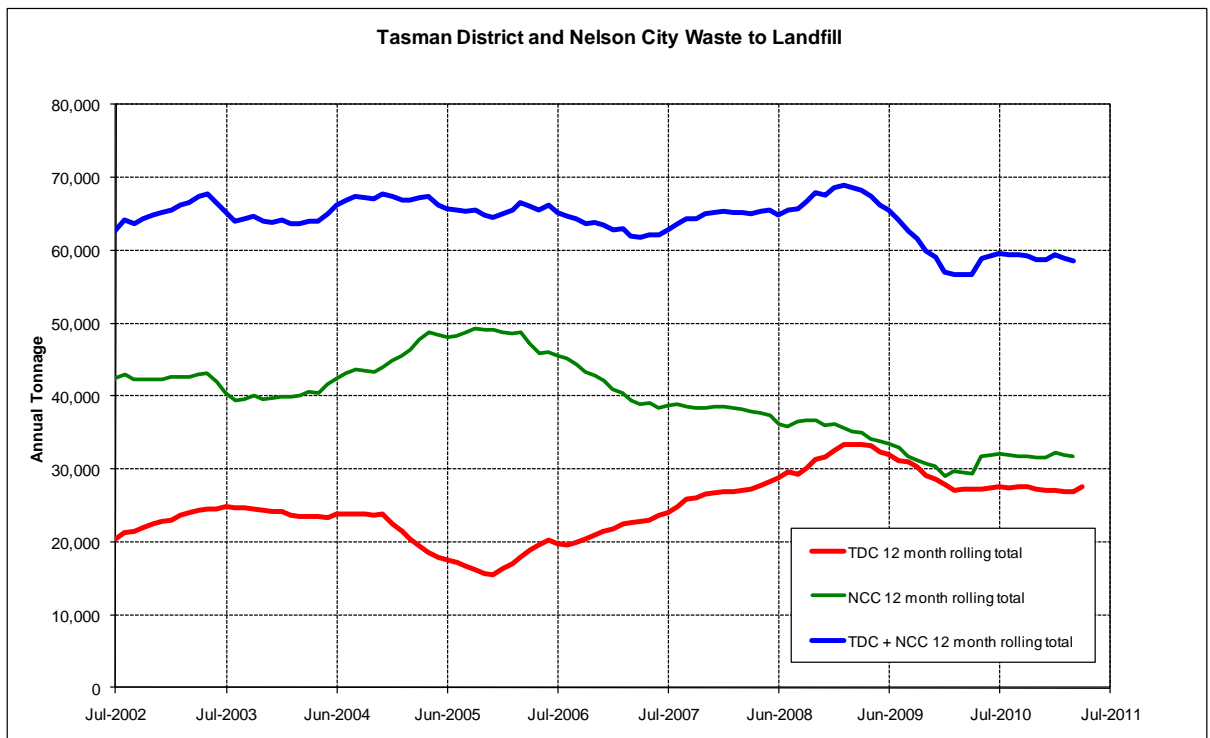


6.8 Improvements to stormwater control are now scheduled for late April and May. The work will include improvement to the stormwater ponds and vegetating areas of the site outside operational areas. This work will augment recent re-routing of the western stormwater cut-off drain and improvements to the landfill working area.

6.9 Staff have recently been considering the implications of the Emissions Trading Scheme for Council’s waste activities. Obligations under the scheme commence next year, and financial implications will commence in 2013. Staff are preparing further information for the committee and intend to present an information paper at a future committee meeting.

**6.10 Regional Waste Minimisation**

6.11 Regional waste quantities indicate an on-going, gradual decline in waste to landfill. The apparent increase in Tasman waste is a one-off increase due to disposal of waste from the Richmond RRC site development.



6.12 Procurement options for waste education services are currently being considered in conjunction with Nelson City Council.

6.13 Staff are also preparing a work plan for development of the joint Waste Management and Minimisation Plan.

<b>8. RECOMMENDATION</b>
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8.1 That the report be received.

<b>9. DRAFT RESOLUTION</b>
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**THAT the Engineering Services Committee receives the Utilities Report  
RESC11-04-05.**

**Appendices:**

Appendix 1: Table 1 WWTP Compliance with Consent Conditions

Appendix 2: Wastewater Exceptions and Sewer Blockages/Overflows

Appendix 3: Water Exceptions