

## STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee  
**FROM:** Jeff Cuthbertson, Utilities Manager  
**DATE:** 27 October 2010  
**SUBJECT:** **Utilities Management Report – RESC-10-11-10**  
Report prepared for meeting of 11 November 2010

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### 1 UTILITIES GENERAL

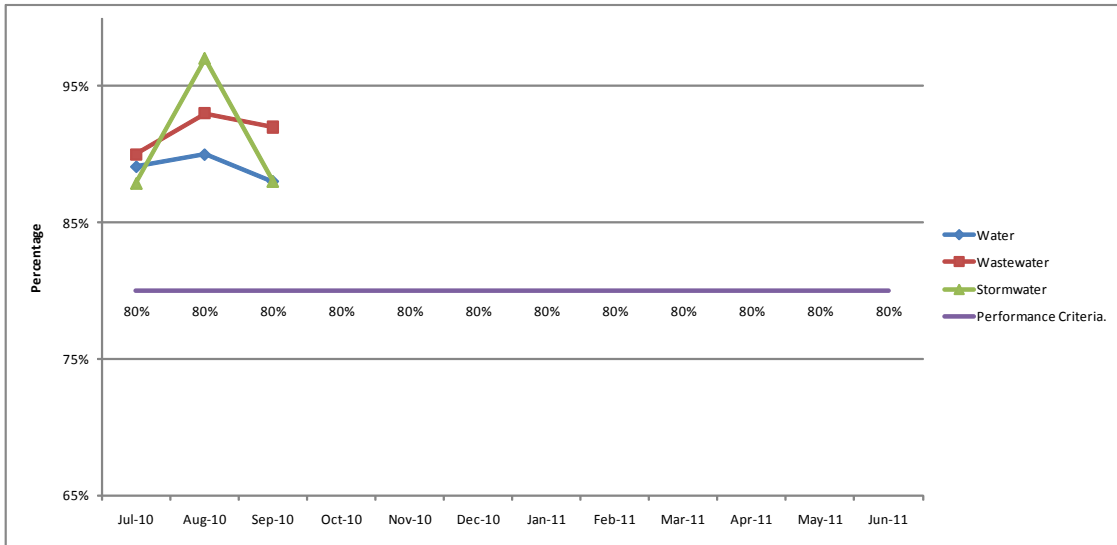
#### 1.1 Contract 688

- 1.2 Downers have undertaken all proactive, routine and non-routine maintenance on the water/wastewater treatment plants, pump stations, reservoir sites and stormwater assets as scheduled within their September and October 2010 programmes.
- 1.3 The stormwater and wastewater networks have on the whole performed reasonably well.
- 1.4 The incidence of significant rain events has been limited with minimal impacts to these networks. The rain event of 29-30 September caused localised issues in Golden Bay and resulted in increased flows to wastewater treatment plants.
- 1.5 The majority of water networks have performed well during the last period. The exception is the Motueka water supply, which has had issues with ongoing low level *E. coli* contamination from an unknown source. A precautionary boil water notice was set in place from mid-September and eventually lifted in mid-October following a series of clear test results.
- 1.6 A number of potential risks were identified and improvements carried out. The network currently continues to be supplied entirely from the Recreation Centre source while remedial works are completed at the Fearon's Bush site. Ongoing additional monitoring continues in the interim.
- 1.7 Monthly contract meetings were held on 16 September and 20 October 2010.
- 1.8 Contract 688 Performance Standard Monitoring - The results below summarise the scores resulting from a random selection of audits undertaken on various portions of the water, wastewater and stormwater networks, as required by contract 688.

**Contract 688 Performance Measurement Audit scores July 2010 to June 2011**

	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
Water	89%	90%	88%									
Wastewater	90%	93%	92%									
Stormwater	88%	97%	88%									
Performance Criteria.	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

Contract performance standard measurement target requirement is to achieve a minimum score of 80% in any one discipline.



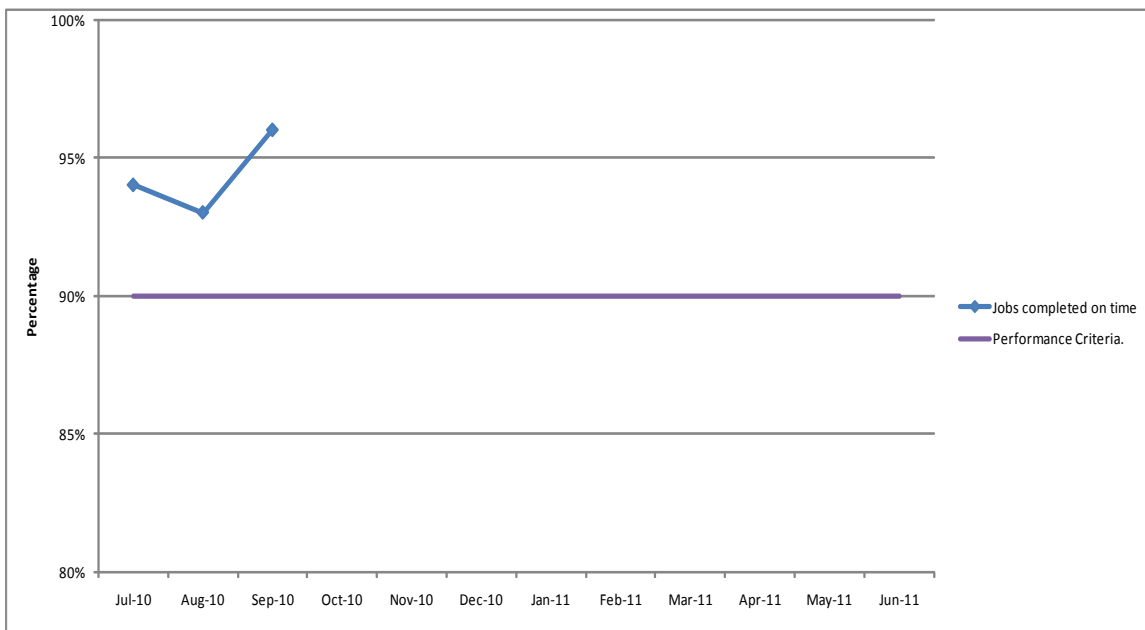
1.9 Performance criteria targets of 80% have been achieved across all three activities.

1.10 Targets for Tasman District Council customer service requirements under Contract 688 are for the Operations and Maintenance Contractor to achieve 90% or above for completion on time. Downers have continued to perform well in this area and achieved an excellent score for the September period of 96%.

**Contract 688 Performance Measurement scores achieved July 2010 to June 2011 - Jobs completed on time**

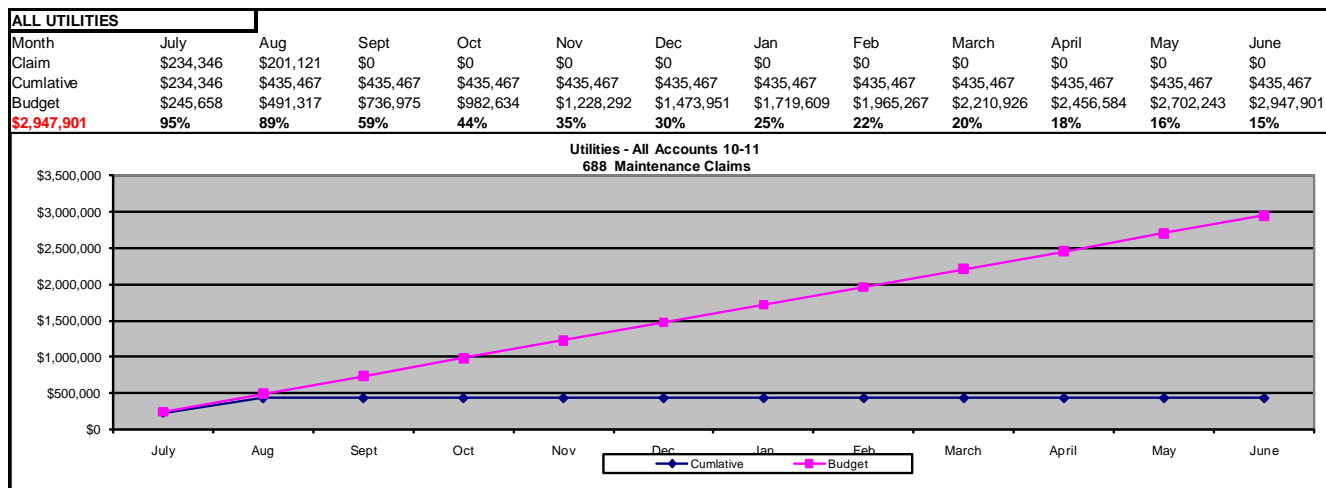
	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
Jobs completed on time	94%	93%	96%									
Performance Criteria.	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%

Tasman District Councils' customer service job completion on time target = minimum of 90%



## 1.11 Financial Performance

1.12 The financial information for Contract 688, current to the end of August 2010 is detailed below, the current September 2010 claim is being processed and therefore the financial information relating to this period will be available within the next report.



## 2 WASTEWATER NETWORKS

2.1 With the summer peak demand period fast approaching, odour management at wastewater treatment plants and pump stations is attracting targeted attention to ensure that operational perspectives cater for adequate odour control mechanisms to function appropriately.

### 2.2 Wastewater Exceptions

1/10/10 Motueka – Trewavas Street, both pumps blocked due to towel in the wetwell, blockage cleared. No overflow reported.

### 2.3 Sewer Blockages/Overflows

03/09/10 Takaka – Motupipi Street – Blockage in manhole resulted in overflow of 1-2m<sup>3</sup> cleaned up.

30/09/10 Ligar Bay – blocked manhole cleared, no overflow occurred.

30/09/10 Takaka Resource Recovery Centre – high inflow contributed to pump station overflow, site cleaned.

30/09/10 Takaka – Abel Tasman Drive, surcharge from manhole due to higher flows from infiltration.

### 2.4 Wastewater Treatment Plants

2.5 Environmental and performance monitoring was routinely undertaken at all Wastewater Treatment Plants (WWTPs) during September and October 2010.

2.6 Motueka - Compliance with resource consent conditions was achieved.

- 2.7 Murchison - Compliance with resource consent conditions was achieved.
- 2.8 St Arnaud - Non-compliance occurred due to TSS in the wetland cells being above the consent limit. Further monitoring is planned in the summer period to determine the impact of algae on TSS concentrations.
- 2.9 Takaka - High rainfall on 29-30 September resulted in a flow above the consent limit to be discharged, and a resulting non-compliance incidence.
- 2.10 Tapawera - Compliance with resource consent conditions was achieved.
- 2.11 Upper Takaka - High rainfall on 29-30 September resulted in a flow above the consent limit to be discharged, and a resulting non-compliance incident. Further investigation into infiltration via private laterals is planned.

**Wastewater Capital works**

- 2.12 Headingly Lane Pumpstation - Construction of pump station and gravity main has been largely completed. All works are currently progressing within programme with the exception of the gravity main which is four weeks behind schedule.
- 2.13 Motueka Pipeline renewals - This contract has been awarded to Ching Contracting Ltd and work is expected to commence in November.
- 2.14 Takaka Wastewater Treatment Plant Upgrade – This project is currently in the detailed design phase. An additional 1.8 hectares has been purchased adjacent to the existing plant. Council has applied for a new draft discharge consent and an alteration to the designation. These have been put on hold whilst the detailed design is finalised and issues raised during the submission process are addressed. It is suggested that Council form a working party to consider the best options regarding the visual development of the wastewater treatment plant. On completion of the detailed design Council will be briefed on the final design and informed of any potential risks if there are any. The intention is to go out to tender later this financial year.
- 2.15 The Motueka Wastewater Treatment Plant Rapid Infiltration Basin (RIB) trial continues to show encouraging results with the RIB performing well and still showing little detectable impact on the groundwater environment. The latest results were presented to a meeting of the working group last month.

**3 WATER NETWORKS**

- 3.1 Overall the water supply networks continued to operate satisfactorily apart from the Motueka supply as detailed earlier in section 1 of this report. There were a few operational issues as described below.
- 3.2 Water Supply Exceptions

10-09-2010	Cropp Place, leak found and repaired near top house following pump found to be running continuously. Leak was entering stormwater network via subsoil drain.
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10-09-2010	Motueka Water Supply, ongoing positive <i>E. coli</i> results, extensive retesting, monitoring, flushing in attempt to isolate a contaminant source. System eventually determined clear of contamination.
24-09-2010	Stafford Drive, Mapua, break in 200mm PVC main, pipe repaired.

### 3.3 New Water Connections

34-36 Edward Street, Richmond

437A Main Road, Riwaka

13 Elms Street, Wakatu Estate

65A Oxford Street, Richmond

### Water Capital Projects

- 3.4 Champion Road Reservoir - Planning and design is complete for the installation of seismic control valving on the Waimea trunk main near the Champion Road reservoir. The work is planned to occur early November.
- 3.5 The Redwoods Watermain renewal contract has been awarded to Tasman Civil Ltd and is due to commence in November.
- 3.6 Richmond Watermain Renewals 2010 - This contract has been awarded to Adcock and Donaldson Ltd and is work expected to commence in November.
- 3.7 The tender for the Takaka CBD Fire Fighting Scheme closed on 29 September. The tenders have been evaluated using the two-envelope weighted attribute method and award of the contract is imminent. The bore drilling has been separately tendered, with one suitable tender received and this work will commence as soon as the easement agreement has been confirmed and returned from the NZ Fire Service.
- 3.8 The contract for the Tapawera Rising Main Replacement has been awarded to Tasman Civil Ltd. The work is expected to commence in November and be completed early in the new year.
- 2.9 Land negotiations for the Richmond East Reservoir and Pipework have continued with no real progress. Council will soon begin the process of compulsory land acquisition for the reservoir site and access.

## 4 STORMWATER NETWORKS

- 4.1 September has been a month of unsettled weather and in spite of numerous weather warnings few significant rain events occurred and no significant issues were reported as a result of these events. The Wharf Road floodgates in Motueka were operated when the predicted rain events coincided with high tides. Pre-heavy rainfall checks were carried out prior to these events.

- 4.2 The Beach Road drain retaining wall in Richmond requires some maintenance at the downstream end of Beach Road, to prevent further tidal erosion between the timber wall and the roadside kerb.
- 4.3 Clearance of spring growth is underway and recent audits of stormwater channels and drains has found them to be in acceptable condition.

### **Stormwater Capital Projects**

- 4.4 Richmond (Reservoir Creek Dam) - A resource consent application for construction of a new spillway and for improvements to the dam structure is currently being processed. Detailed design for this work is complete (pending any additional consent requirements) and tender documents are with Council staff for review.
- 4.5 Negotiations for land purchase are continuing with the landowner of the property immediately downstream of the reservoir and on which the dam sits. The work remains scheduled for construction this coming summer.
- 4.6 Ruby Bay (Tait Street and Stafford Drive) - Detailed design is in progress and a consent application has been prepared for construction of two new stormwater outfalls to the coast at Tait Street and stormwater improvements on Stafford Drive.
- 4.7 Mapua (Seaton Valley Stream) - Sealing of the Toru Street causeway is scheduled for this month, and this will conclude the construction works on the causeway (Contract 762).
- 4.8 Agreement has now been reached with landowners for construction of an additional culvert upstream, adjacent to the Mapua School and Old Mill Walkway. Detailed design is in progress and this work is expected to be advertised for tender in November with construction scheduled to commence in January.
- 4.9 Further culvert construction and stream widening works are programmed for the coming year and will be subject to ongoing landowner negotiations.
- 4.10 Collingwood (Swiftsure Street) - Council staff have been working with local residents and members of the Golden Bay Community Board to resolve stormwater issues in this area. Potential delays have been encountered due to landowner access issues. A preferred option has been identified and is discussed in a separate paper to the committee.

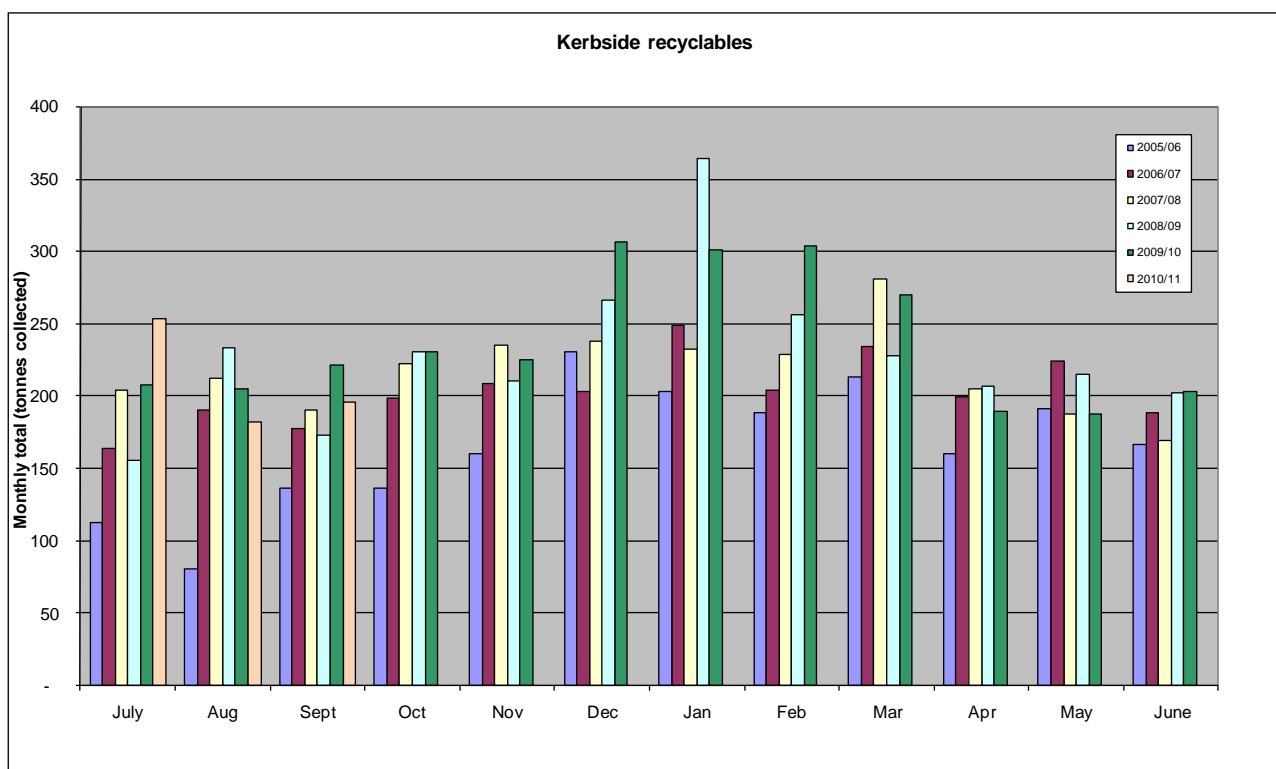
### **4.12 Telemetry**

- 4.13 Analogue Telemetry - The network is working well. A telemetry channel lock-on occurred in mid-September and measurements indicated an issue at the Mt Campbell repeater. The exact cause remains unknown but has previously resulted from solar panel sites with insufficient back-up battery power.
- 4.14 The digital telemetry system has been operating satisfactorily. In St Arnaud, the new base station has been installed. The switch-over of the sewer sites is complete and sites are operating as expected.

## 5 SOLID WASTE

### 5.1 Kerbside recycling and bag collection

- 5.2 Kerbside recycling volumes for the first quarter of the financial year were almost equal with the similar period last year, although August and September volumes were down on last year, with July totals particularly high.
- 5.3 Council bag sales have increased over the last quarter but collected refuse quantities remain static. The increase in bag sales may be a reflection of retailer's bulk purchasing prior to the GST price increase.
- 5.4 Contractor performance has continued to improve particularly in response to enquiries, with all requests completed on time for the month of September.
- 5.5 Planning for export of glass continues, with this work being programmed around site development work at Richmond. It is now unlikely that the collection methodology will need to be changed so there will be no change of service for Council's customers.
- 5.6 Planning for the Christmas period is in progress, with daily rubbish collections and twice weekly recycling collections at Kaiteriteri scheduled.



### 5.7 Resource Recovery Centres

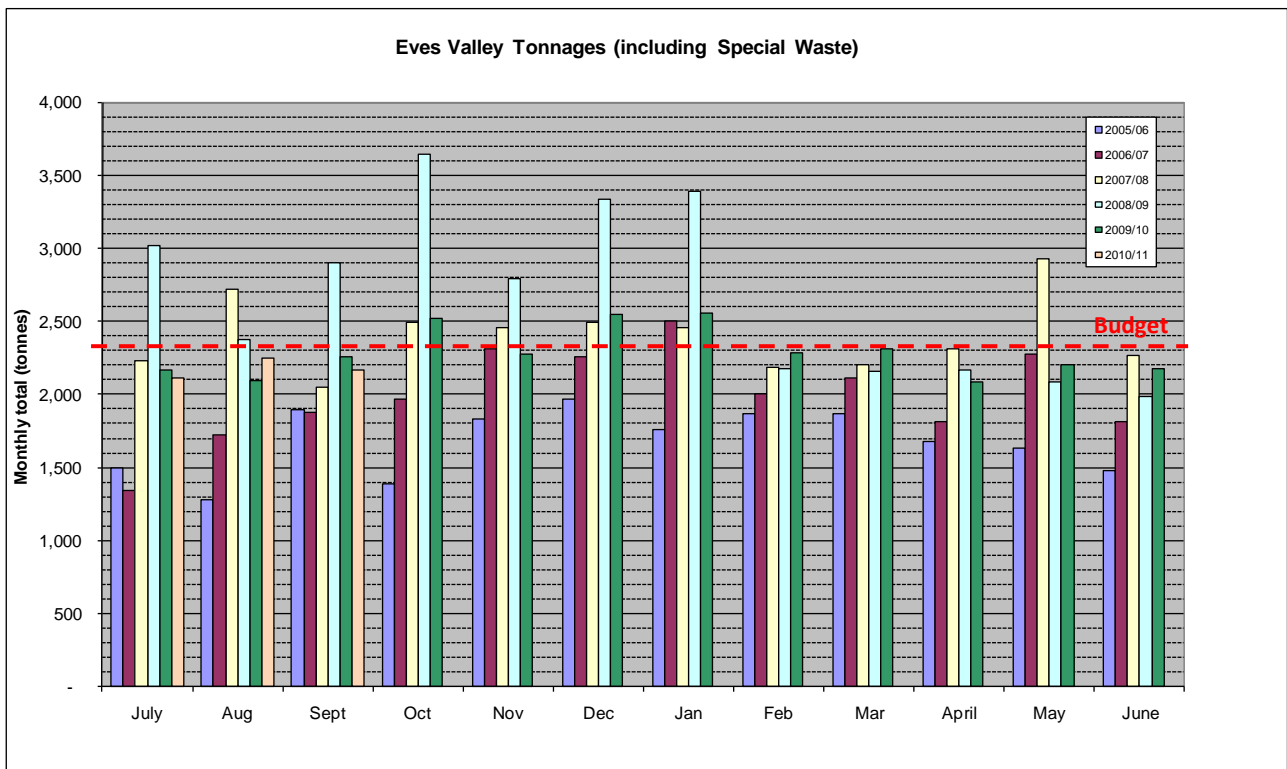
- 5.8 Disposal quantities for the first quarter are equal to the same quarter of last year and income for these sites is on budget.
- 5.9 Refurbishment of a new reuse shop in Richmond is now largely complete. Transfer of the site operator (Kahurangi Employment Trust) to the new facility is now programmed for December, to align with other site work in Richmond.

5.10 Following a condition assessment of existing compactor units at the Richmond and Takaka sites, a decision has been made to replace the compactor at Richmond and to retain the Takaka compactor. Expressions of interest were sought in October, and a short list of suppliers will shortly be invited to price for the supply and installation of this compactor and four new compactor bins.

5.11 Detailed design for redevelopment of the Richmond RRC is in progress. This work, which is scheduled to commence in January will provide a new entrance to the site from Fittal Street, improved drop-off areas for recycling and reuse and improved safety for users of the site. A Request for Qualifications for this work closed on 27 October to enable short-listing of tenderers.

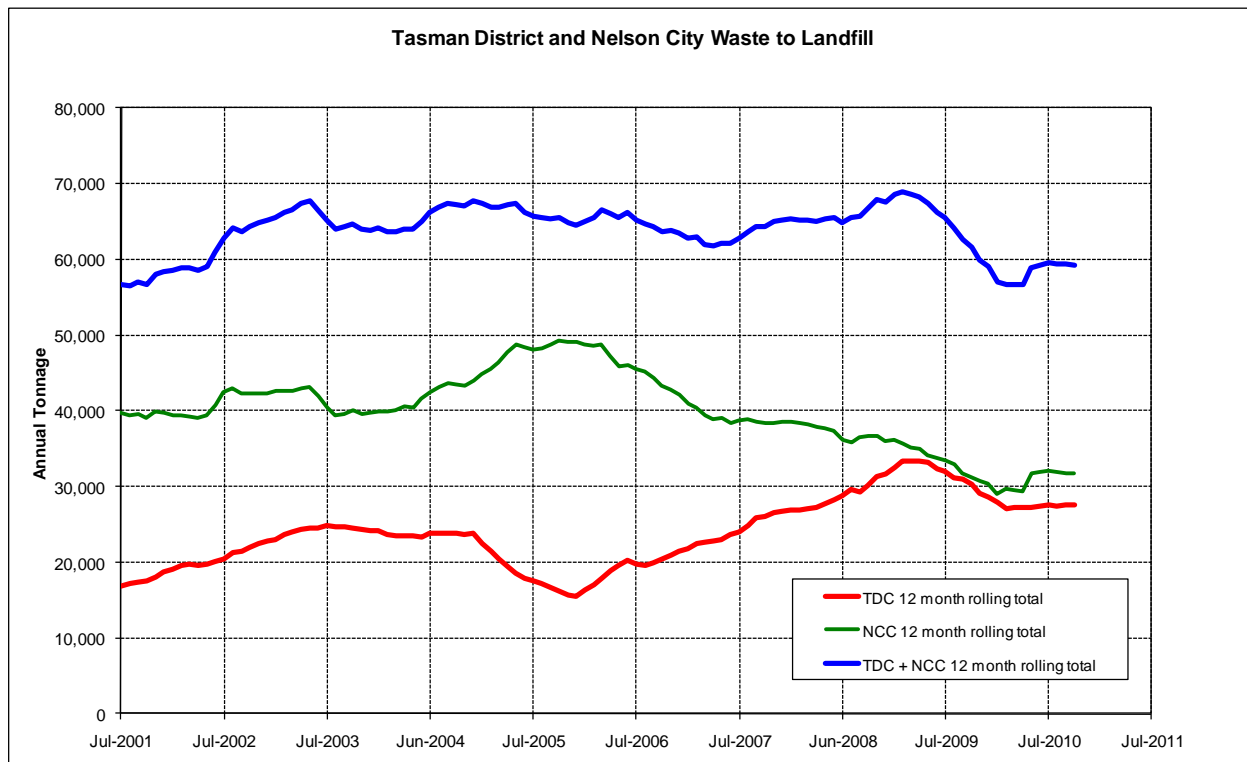
5.12 Further site development at the Mariri and Collingwood sites is scheduled for later in the financial year.

5.13 Waste tonnages to the Eves Valley landfill continue to be stable and on track for budget targets.



5.15 Regional waste quantities have also stabilised and show a flat trend of disposal.





- 5.16 Landfill operation and waste haulage operations commenced under a new contract (Contract 781) on 1 October. Contract hand-over was essentially seamless, with excellent cooperation between the out-going and incoming contractors (Sicon and Fulton Hogan respectively).
- 5.17 Initial field work for geotechnical and groundwater investigations at Eves Valley has now concluded. Information gathered as part of this work is being used to inform the design of the proposed next stage of the landfill.
- 5.18 Waste minimisation – eDay - National funding for this event has been confirmed with two sites in the Nelson-Tasman region, in Lower Moutere and at Stoke on Saturday 6 November. The national organisers have generously supported the event in Nelson-Tasman with the provision of additional funding.

## 6 TENDERS

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

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	TDC estimate	Budget for this item	Comment
793	Redwoods Rural Watermain Renewal	5	Tasman Civil	\$176,580	\$314,439	\$194,170	\$190,765	
794	Richmond Watermain Renewals	4	Adcock & Donaldson	\$423,677	\$555,135	\$512,570	\$480,000	
802	Tapawera Water Rising Main	4	Tasman Civil	\$209,220	\$294,070	\$279,580	\$225,083	
803	Motueka Sewer Renewals	4	Ching Contracting	\$332,051	\$368,889	\$380,310	\$420,000	
808	Takaka Firefighting Scheme Bores	1	Waimea Drilling	\$93,995	-	\$79,230	-	Part only of total firefighting scheme

## 7 RECOMMENDATION

**THAT the Utilities Management Report (RESC-10-11-10) be received by the Engineering Services Committee.**

Jeff Cuthbertson  
**Utilities Asset Manager**