

Report No:	RESC12-07-07
File No:	
Date:	28 June 2012
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 19 July 2012
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: Utilities Report

EXECUTIVE SUMMARY

This report provides a summary of the Utilities activities for May-June 2012.

Downer have maintained their level of performance with all proactive, routine and non-routine maintenance on the water and wastewater treatment plants, pumpstations, reservoir sites and stormwater assets as scheduled.

In solid waste operations contractors are generally performing very well. Volumes to landfill have finished above budget but operational expenditure has also tracked above budget, due to cost fluctuations and unanticipated events.

RECOMMENDATION

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Utilities Report, RESC12-07-07.

Report No:	RESC12-06-07
File No:	
Report Date:	28 June 2012
Information Only – no decision required	

Report to: Engineering Services Committee
Meeting Date: 19 July 2012
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: **Utilities Report**

1. Utilities General

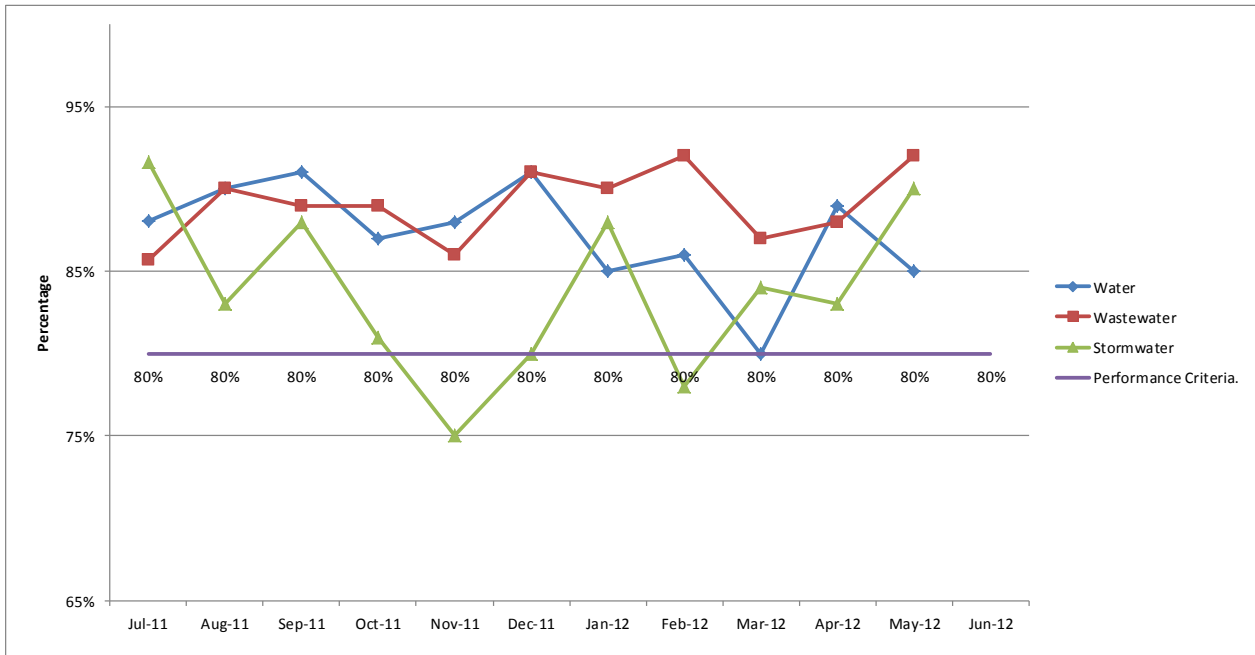
- 1.1 Downer undertook all proactive, routine and non-routine network maintenance on the water and wastewater treatment plants, pumpstations, reservoir sites and stormwater assets as scheduled and required within their programme.
- 1.2 Downer have also completed a portion of additional project work including flood recovery, meter renewals and improvements to Richmond and Waimea bores, Thorp Street sewer pumping station de-commissioning and emergency works to Reservoir Creek Dam. These additional projects have been adequately resourced and managed.
- 1.3 **Contractor Performance and Performance Standard Measurements Monitoring**
As required under Contract 688, MWH undertook a random selection of audits on various portions of the water, wastewater and stormwater networks. The contractor has performed well over the May period and therefore achieved above the minimum performance criteria required over the three utility networks.
- 1.4 The contractor's performance in the areas of stormwater and wastewater improved in comparison to last month and water dipped slightly but remained above the required standard.

1.5 Contract 688 Overall Performance Standard Summary

Contract 688 Performance Measurement Audit scores July 2011 to June 2012

	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Water	88%	90%	91%	87%	88%	91%	85%	86%	80%	89%	85%	
Wastewater	86%	90%	89%	89%	86%	91%	90%	92%	87%	88%	92%	
Stormwater	92%	83%	88%	81%	75%	80%	88%	78%	84%	83%	90%	
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.



Performance Standards - Contract 688 -- 2011 -- 2012												
	July 2011	Aug 2011	Sept 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	April 2012	May 2012	June 2012
Contract Management	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	
Water Supply Network	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	
Wastewater Network	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
Stormwater Network	Green	Green	Green	Green	Red	Green	Green	Red	Green	Green	Green	

Key: ■ Passed appropriate Performance Standard in accordance with C688
■ Not achieved appropriate Performance Standard in accordance with C688

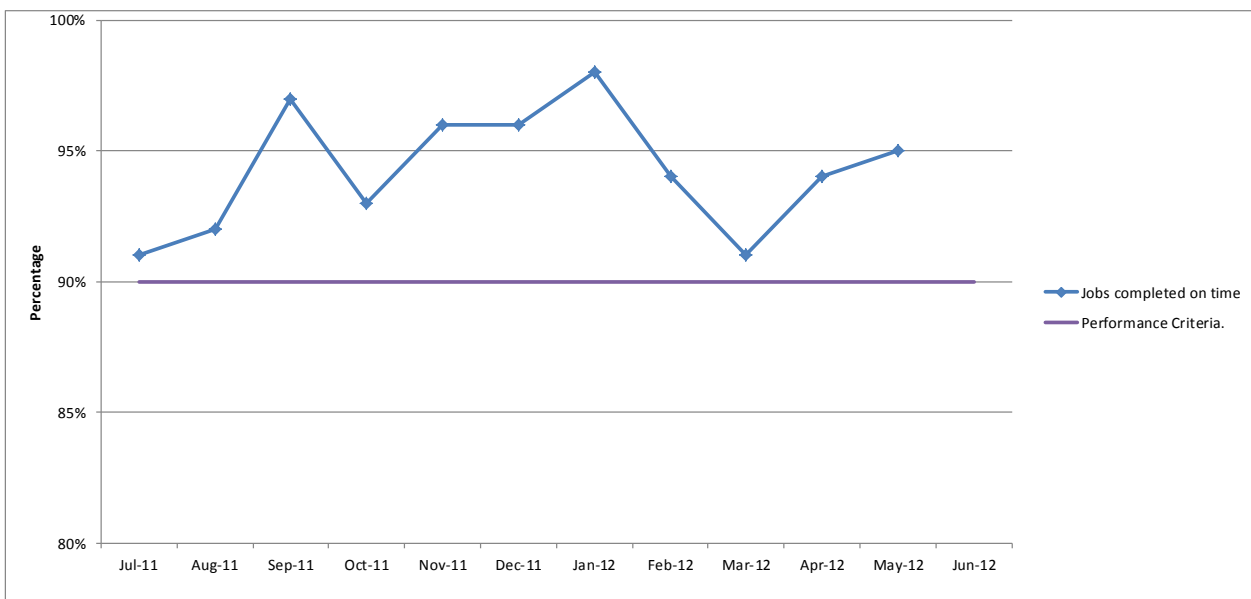
Date	Reason	Amount Deducted
Oct-11	Weekly exception and sewer overflow reports not recieved on time	\$1,201.65
Oct-11	Upper Takaka UV plant out of operation for 2 to 3 days, could have been avoided with more pro-active maintenance.	\$1,969.99
Nov-11	Stormwater maintenance score of 75% on assets audit in November 2011, excess vegetation / weed growth in the SW channels.	\$843.92
Feb-12	Stormwater maintenance score of 78% on assets audit in February 2012, excess vegetation / weed growth in the SW channels.	\$1,092.75
	Total Deductions to date 2011-2012	\$5,108.31

1.6 Customer Services - Job Completion Summary

Targets for Tasman District Council Customer Services and requirements under Contract 688 are for the Operations and Maintenance contractor to achieve 90% or above for completion on time. Downer achieved 95% for May 2012. The following data confirms that the contractor has been able to consistently maintain the required response times.

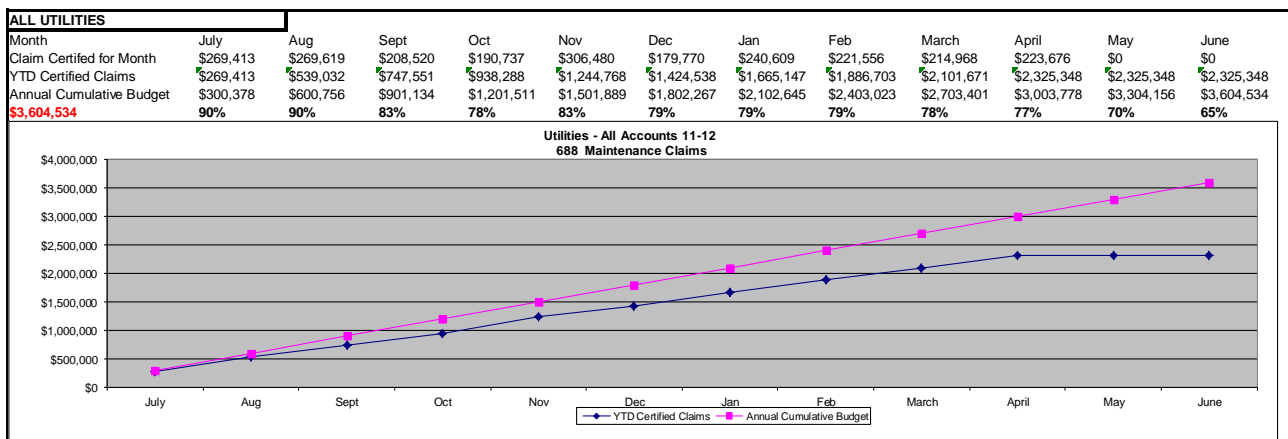
Contract 688 Performance Measurement scores achieved July 2011 to June 2012 - Jobs completed on time												
	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Jobs completed on time	91%	92%	97%	93%	96%	96%	98%	94%	91%	94%	95%	
Performance Criteria	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%

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



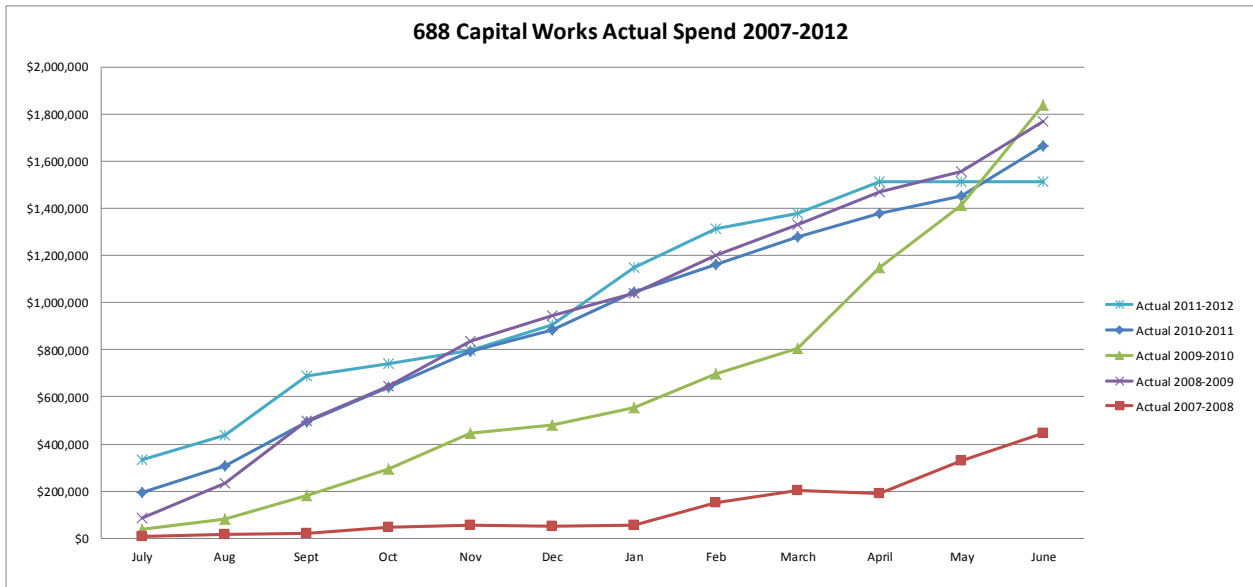
1.7 Financial Performance

The utilities budgets for the 2011/2012 financial year (to April) are shown below. Expenditure for the year has continued to track below budget.



1.8 The data and graph below tracks the capital works invested for work undertaken via Contract 688 from the beginning of the contract in July 2007 to April 2012.

Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Actual 2011-2012	\$333,533	\$437,191	\$689,827	\$740,869	\$796,890	\$905,005	\$1,149,046	\$1,313,596	\$1,377,771	\$1,513,322	\$1,513,322	\$1,513,322
Actual 2010-2011	\$194,183	\$306,654	\$493,545	\$642,572	\$793,184	\$884,528	\$1,042,846	\$1,161,502	\$1,278,057	\$1,378,314	\$1,450,584	\$1,663,696
Actual 2009-2010	\$36,183	\$79,223	\$182,689	\$293,389	\$446,399	\$480,023	\$552,922	\$695,454	\$806,942	\$1,148,318	\$1,412,257	\$1,839,032
Actual 2008-2009	\$85,625	\$234,176	\$499,608	\$646,129	\$837,549	\$942,471	\$1,040,638	\$1,199,577	\$1,331,379	\$1,470,257	\$1,554,067	\$1,767,090
Actual 2007-2008	\$6,219	\$15,742	\$19,592	\$46,759	\$56,628	\$51,384	\$55,566	\$149,379	\$202,930	\$191,291	\$326,922	\$446,754



2. Wastewater Networks

2.1 Operations and Maintenance

April-May was a relatively dry period and overall the wastewater networks have performed well. There have been no significant issues or exceptions to report during that period, over and above those noted in the exception details within this report.

2.2 Wastewater Exceptions

As the table below indicates a variety of faults occurred during April with very few requiring further follow up work to prevent recurrence.

Location	What	Overflow	Why	Remedial Action
78 Beach Road, Collingwood	Blockage in manhole	No overflow	Root intrusion	Attended to by contractor
14 Fittal Street, Richmond	Blocked lateral	No overflow	Material build up	Attended to by contractor
10 Norman Bensemann Place, Takaka	Blocked lateral	No overflow	Root intrusion	Attended to by contractor
Williams Street, Collingwood	Pipe blockage	Yes – Unknown discharge	Material build up	Attended to by contractor
688 Abel Tasman Drive, Pohara	Broken pipe	Yes – small patch in ground only	Due to wear and tear	Attended to by contractor

Location	What	Overflow	Why	Remedial Action
109 Aranui Road, Mapua	Pump 2 is not working	No overflow	Problems with non return valve	Attended to by contractor
Motueka WWTP	Odour control unit leaking fluid	No overflow	Unsure	Attended to by contractor
Woodlands Ave, Motueka	Pump fault	No overflow	Smaller pumps may not be keeping up with high demand	Attended to by contractor, these pumps are soon to be upgraded to cutter pumps
Woodlands Ave, Motueka	Pump fault	No overflow	Smaller pumps may not be keeping up with high demand	Attended to by contractor, these pumps are soon to be upgraded to cutter pumps
Queen Street/ Edward Street, Richmond	Loose manhole lid	No overflow	Old cast iron lid that needed replacing	Attended to by contractor
Woodlands Ave, Motueka	Pump fault	No overflow	Smaller pumps may not be keeping up with high demand	Attended to by contractor, these pumps are soon to be upgraded to cutter pumps
119 Wensley Road, Richmond	Loose manhole lid	No overflow	Picton ring rocking on concrete beneath	Attended to by contractor
Woodlands Ave, Motueka	Pump fault	No overflow	Smaller pumps may not be keeping up with high demand	Attended to by contractor, these pumps are soon to be upgraded to cutter pumps
41 Selwyn Street, Takaka	Strong sewerage smell	No overflow	Contractor thinks damp spots from December storm might be stagnating	Attended by contractor
11B College Street, Motueka	Pipe blockage	No overflow	Root intrusion	Attended to by contractor

2.3 Wastewater Treatment Plant (WWTP) Compliance

During April-May environmental and performance monitoring was routinely undertaken at all wastewater treatment plants.

2.4 The table below 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 are discussed below.

WWTP	Compliance	If "no", What	Cause	Remedial Action
Collingwood	Yes			
Motueka	No	5 April 2012: The <i>E.coli</i> count of effluent discharged from wetland north to the river breached the consent limit of 260 cfu/100ml per single sample. The sample measured 2000 cfu/100ml	High loading / overflow	Compliance notified
Murchison	Yes			
St Arnaud	Yes			
Takaka	Yes			
Tapawera	Yes			
Upper Takaka	Yes			

2.5 Capital Projects

Sewer renewal contracts for Motueka have now been completed including Courtney Street and Grey Street along with the final length along High Street.

2.6 Mapua Wharf Wastewater Pumpstation Upgrade

Ching Contracting has continued work on the Mapua pumpstation. Some delays have been incurred due to archaeological finds and the associated processes required by the Historic Places Trust and by recent wet weather delaying disposal to Eves Valley. The pumpstation is now entering the commissioning phase and the project is on track for completion by early August.

3. Water Networks

3.1 Operations and Maintenance

April-May was a relatively dry period and overall the water networks have performed well. There have been no significant issues or exceptions to report during that period, over and above those noted in the exception details within this report.

3.2 Recent rainfall events have continued to compromise the quality of water supplies with surface takes, including Pohara Valley and Dovedale, resulting in an ongoing requirement to boil drinking water for users on both schemes.

3.3 Water supply exceptions are noted in the table below:

Location	What	Why	Remedial Action
Stafford Drive Mapua	150mm PVC main break	Fragile pipe	New section of pipe fitted
Humphries Creek Pump Stn Dovedale	High pressure line failure to chlorine pump	Special high pressure pipe failed	New pipe fitted. Vibration issues to be resolved.
Brightwater WTP	HL Pump No.3 failed	Old age	New pump ordered to match pumps 1 and 2 (renewed in 2010).
Win Valley Dovedale	80mm PVC main break	Old glue joint pulled apart.	New section of pipe fitted.
Win Valley Dovedale	50mm main break at valve	Old corroded fittings	Valve assembly renewed.
River Road Redwood Valley	100mm PVC main break	Fragile pipe	New section of pipe fitted.
Cropp Place Richmond	No water to houses.	Electrical fault at pump station	Fault repaired

3.4 Water service connections were as follows:

- One in Richmond
 - One in Mapua
 - One in Dovedale
 - One in 88 Valley
-
- Two rural water unit reductions were completed

Disconnections

- One in Motueka
- One in Dovedale

3.5 Capital Projects

3.6 **Richmond Water Treatment Plant**

Detailed design continues on the pipe reconfiguration, treatment process and the proposed site for the Richmond Water Treatment Plant. An independent peer review of mechanical design and process elements of the design is complete. It confirmed the design and process is robust and appropriate and that there were no areas of concern or issues of significance that had not been addressed within the process.

3.7 Downer has made steady progress toward completion of the Water Meter Renewals contract. Remaining work in Tapawera is practically complete and all work has been completed to a good standard.

3.7 The contract for improvements to the Pohara Valley water supply remains on hold awaiting the approval to proceed from the Historic Places Trust. The work is partially sited within a Cultural Heritage Precinct and a compulsory 15 day period for objections to the consent is still outstanding. The physical work is expected to be completed prior to the end of August 2012.

4. Stormwater Networks

4.1 **Operations and Maintenance**

Downer carried out pre-storm checks and operated the Motueka floodgates as required over the April-May period resulting in the systems being well prepared in anticipation for rain events. While there were a number of rainfall events, none caused any significant network issues. Pre-storm checks were undertaken twice during this period as a precautionary response to weather forecasts.

4.2 There has been an ongoing effort by Downer throughout April to get back on track and control vegetation growth within the stormwater network. Audits have highlighted an improvement in this area and all relevant stormwater performance standards have been achieved.

4.3 Capital Projects

Ching Contracting have completed the Ruby Bay Stormwater contract (Tait Street and Stafford Drive) however they completing further work to remediate damage resulting from the recent storm event. Minor repairs to the new outfall structure and open channel above the new work are scheduled over the coming month.

- 4.4 Work is nearly complete on the Paton Rock stormwater contract which has been awarded to Ching Contracting. The contract includes pipework ranging from 300mm to 450mm in diameter and a stream outfall.
- 4.5 Minor additional work remains to be completed in Bill Wilkes Reserve following on from the work completed by Tasman Civil. This includes additional rock work and installation of subsoil drainage. The fill material remains on site in the meantime and will be removed for use at a suitable site in the new financial year.
- 4.6 Following damage over the December 2011 rainfall event staff have considered options for repair and improvement to the Reservoir Creek Dam. The original proposal to repair and improve the dam has been confirmed and a land purchase offer has been made to the current landowner. The capital budget for this work is now scheduled for this financial year.
- 4.7 A contract has been awarded for the re-construction of road pavement and stormwater improvements in Swiftsure Street, Collingwood. This work will improve stormwater control in this area as well as providing an all-weather access to the Collingwood water supply reservoir and is expected to be completed in September.

5. Telemetry

- 5.1 The analogue telemetry network has performed well during the reporting period.
- 5.2 To overcome the data capacity limitations of the base station server, the Council's Information Services staff have secured the upsized server licence to allow further sites to be added to the digital system.
- 5.3 The work to upgrade telemetry at Richmond Upper Reservoirs on Valhalla Lane and connect them to SCADA InTouch is now complete.
- 5.4 A draft programme for telemetry upgrades for the new financial year has been received and is being assessed for approval so that work on priority sites can be progressed, and work can be planned and managed efficiently throughout the year.

5.5 Telemetry exceptions:

System	Address	Fault	Why
Sewer	Motueka WWTP	Screen level controller	Relay contacts corroded
Water	Waimea Wells 5-7	Black Touchscreen	Power supply problem
Water	Brightwater WTP/PS	Pump 3 failed	End of life span
Sewer	Jenkins Rd	System fault pump 1 faulty	Faulty Fuse motor issue pump 1
Water	Richmond Cropp Place	Secondary Power Supply 24VDC	Hardware failure

6. Solid Waste

6.1 Kerbside Recycling and Bag Collection

Kerbside collections continued although responses to service requests deteriorated in the months of May and June. This performance was primarily due to a breakdown in communication systems and has been since rectified.

6.2 An extension of kerbside collections to an additional 300 properties commenced on Monday 2 July 2012 with recycling bins and information distributed to households in the two weeks leading up to July. New collection routes include roads in Onekaka, Brooklyn, Tasman, Ruby Bay, Redwood Valley, Appleby, Aniseed Valley and St Arnaud. Over the next two weeks the refuse collection point on the Aniseed Valley hill will be removed leaving the Tadmor collection point as the last in the district.

6.3 Council is currently considering a cost saving proposal from the kerbside collections and Resource Recovery Centre operations contractor (Smart Environmental), which would apply from 1 October 2012. The proposal is not expected to effect levels of service.

6.4 Resource Recovery Centres

Preliminary data for the financial year ending June indicate tonnages from Resource Recovery Centres are 1% over budget with increases in Richmond (4% above budget) and Murchison (22%) and decreases in Mariri (-3%), Takaka (-12%) and Collingwood (-29%).

6.5 Collation of income and expenditure for the financial year is in progress but initial indications are that revenue per tonne has trended up through the financial year but dropped in the last quarter. Expenditure at some sites has continued to track above budget due to unexpected maintenance and operational requirements but staff have minimised discretionary expenditure.

6.6 Tidiness of the Richmond and Mariri sites has improved significantly over the last quarter with positive feedback from staff and the public regarding the new recycling

layout at Mariri. Recyclable product is now being processed more quickly at Richmond and this has also reduced litter issues.

- 6.7 New signage has been installed at all of the Resource Recovery Centres along with improved facilities for oil, paint and auto batteries on some sites.
- 6.8 The Resource Recovery Centre in Murchison has recently suffered two break-ins with surveillance equipment stolen in the first incident. Illegal dumping of waste has also increased at this site over the year. Staff will be reviewing security arrangements on this and other sites in the new financial year.

6.9 Greenwaste Processing

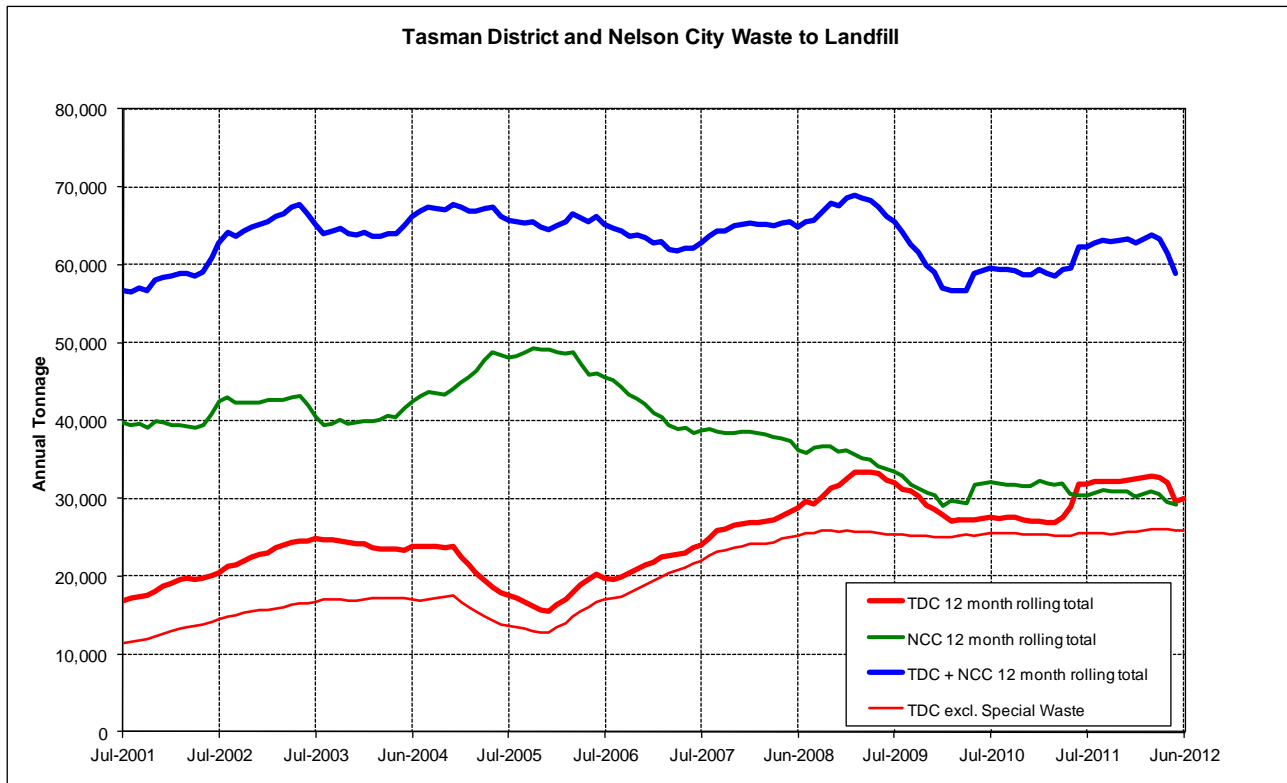
Processing of greenwaste has progressed reasonably well this year with data indicating month-on-month growth of greenwaste volumes. This growth is likely due to an increasing price differential between greenwaste and mixed waste disposal (currently \$18.80 versus \$55.00 per cubic metre). Council's contractor, Greenwaste to Zero, did struggle to manage stormwater on-site during December and January and has worked to improvement environmental management since January.

6.10 Eves Valley Landfill

The total waste to the Eves Valley for the financial year has been 29,992 tonnes, almost 2500 tonnes above budgeted estimates. This additional waste has also resulted in unbudgeted income for the account.

- 6.11 The increase has been almost entirely driven by special waste disposal and almost half of this quantity has been generated by the Mapua wastewater pumpstation excavation. Waste from the Mapua site has been deposited in a specifically managed area of the landfill.
- 6.12 However, expenditure at the site continues above budgeted levels. A significant rainfall event in June (150mm over two days) resulted in excessive leachate generated on site and required this liquid to be removed by tanker from the site. The contractor (Fulton Hogan) performed particularly well during this event with best practice management of stormwater on site and 24 hour attendance at times. The new telemetry assisted in the response to the event but further work will be required to better manage leachate on site.
- 6.13 General levelling of the landfill has also continued with front-face bund construction proceeding on both the western and eastern sides. Planning has commenced for the management of sludge that may arise from the Motueka Wastewater Treatment Plant in the new financial year. The quantity of sludge could be significant and will need to be carefully managed.
- 6.14 Regional waste trends for Nelson and Tasman are indicated in the following graph. In this instance the non-special waste has been shown for Tasman to indicate the

underlying trend for Resource Recovery Centres (largely flat) and the variable nature of special waste volumes.



7. Tenders

The following tenders have been awarded since the last meeting:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	Council estimate	Budget for this item
860	Swiftsure Street Reconstruction Works	3	CJ Industries	\$182,375	\$242,147	\$233,485	\$198,164

8. Recommendation

8.1 That the report be received.

9. Draft Resolution

9.1 THAT the Engineering Services Committee receives the Utilities Report RESC12-07-07.