

Report No:	RESC12-06-07
File No:	
Date:	23 May 2012
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 07 June 2012
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: Utilities Report

EXECUTIVE SUMMARY

This report provides a summary of the Utilities activities for April-May 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 performing well with volumes to landfill consistent with forecasts and comparable to actual quantities delivered at the same time last year, but with expenditure tracking over budget.

Capital projects are generally on track but priority, timing and expenditure requirements for some projects have been impacted due to adjustments to prioritisation.

RECOMMENDATION

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Utilities Report, RESC12-06-07.

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1. Utilities General

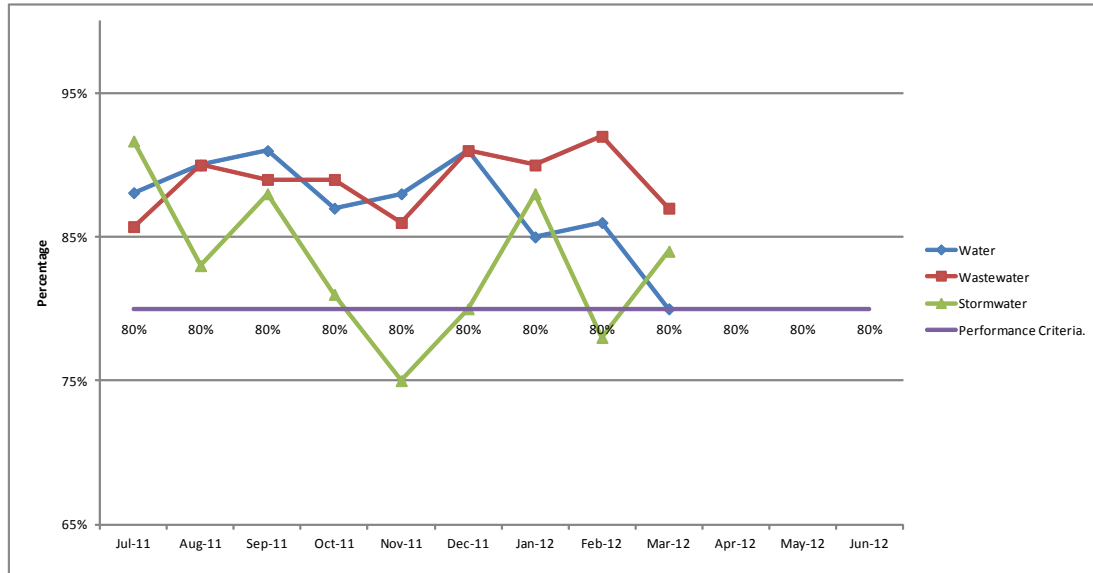
- 1.1 Downer undertook all proactive, routine and non-routine network maintenance on the water and wastewater treatment plants, pumpstations, reservoir sites and stormwater assets as scheduled and required within their programme. Downer have also been undertaking a significant amount of additional project work, including flood recovery, meter renewal and water quality testing (including Richmond New Source); these projects have to date been adequately resourced and managed.
- 1.2 MWH carried out audits across all areas of the utilities network on both ongoing and completed work. Downer has continued to provide a consistent level of response and ownership of network issues.
- 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 contractors performance in the water and wastewater areas dropped but remained above the required standard, and results of maintenance audits of the stormwater system have improved.

1.4 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%			
Wastewater	86%	90%	89%	89%	86%	91%	90%	92%	87%			
Stormwater	92%	83%	88%	81%	75%	80%	88%	78%	84%			
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	Green	Green	Green	Green	Green	Green			
Water Supply Network	Green	Green	Green	Green	Green	Green	Green	Green	Green			
Wastewater Network	Green	Green	Green	Green	Green	Green	Green	Green	Green			
Stormwater Network	Green	Green	Green	Green	Green	Green	Green	Green	Green			

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

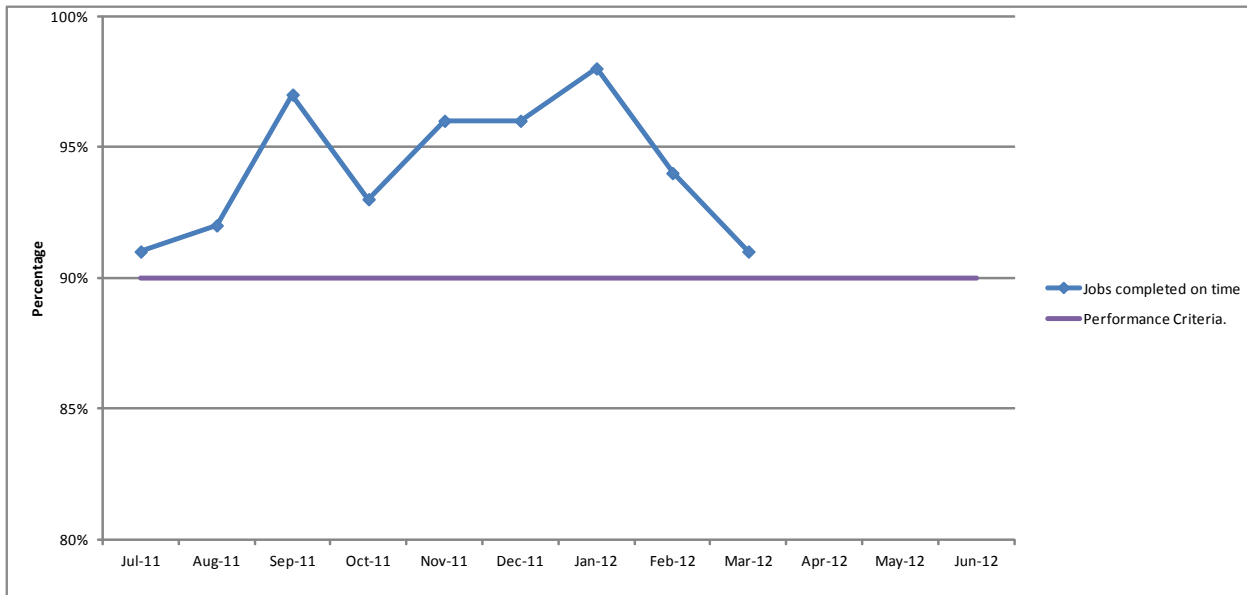
Date	Reason	Amount Deducted
Oct-11	Numerous weekly exception and sewer overflow reports not recieved on time	\$1,201.65
Oct-11	Upper Takaka UV plant out of operation for 2 to 3 days, could have been avoided with more pro-active maintenance.	\$1,969.99
Nov-11	Stormwater maintenance score of 75% on assets 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

1.5 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 91% for March 2012.

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%			
Performance Criteria.	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%

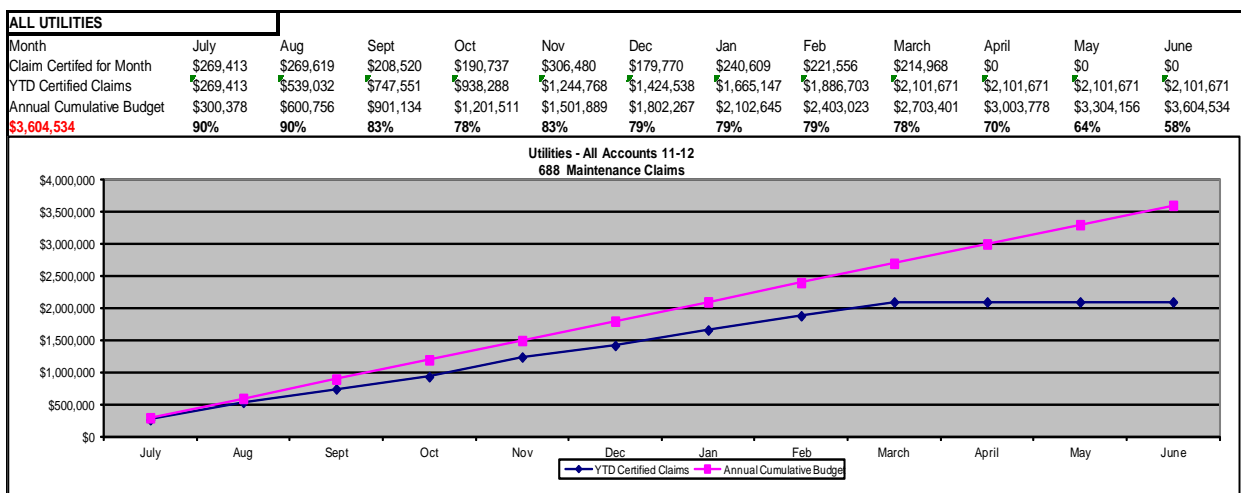
Tasman District Councils' customer service job completion on time target = minimum of 90%



1.6 The above data confirms that the contractor has been able to consistently maintain the required response times.

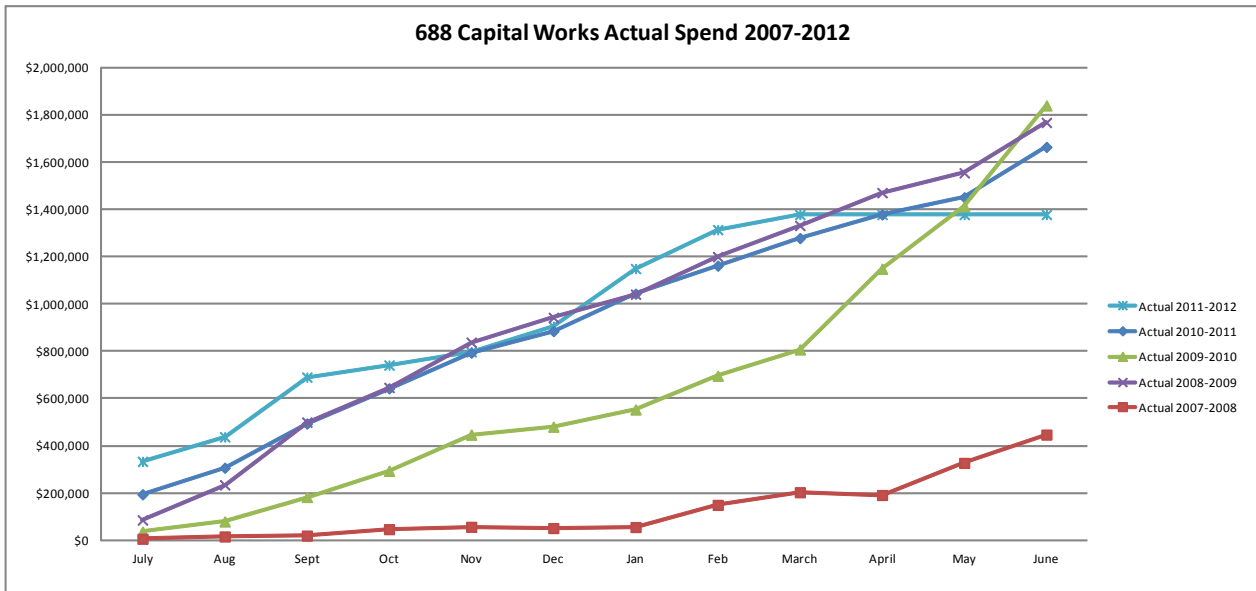
1.7 Financial Performance

The Utilities budgets to date for the 2011/2012 financial year are shown below. To date the information is only available up to the end of March 2012 as the April 2012 claim is currently being assessed and processed.



1.8 The data and graph below tracks the Capital Works spend on works undertaken via Contract 688 from the beginning of contract in July 2007.

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	\$1,377,771	\$1,377,771	\$1,377,771
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 and early 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.

2.2 Wastewater Exceptions

As the table below indicates, a variety of faults occurred over this period; some requiring further follow up work to prevent recurrence.

Location	Date	Job Number	What	Overflow	Why	Remedial Action
Waller Street Pump Station, Murchison	01/03/12	48359	Both pumps were blocked	Yes – Unknown discharge	Material build up	Contractor attended
Woodlands Avenue Sewer Pump Station, Motueka	01/03/12	48364	Pump blockage	No overflow	Material build up	Contractor attended
5 Tait Street, Ruby Bay	07/03/12	48440	Pipe blockage	No overflow	Upgraded bad connection caused blockage	Contractor attended and a new connection was redone
Breaker Bay Pump Station, Kaiteriteri	08/03/12	48469	Alarm activated due to blockage	No overflow	Material build up	Contractor attended
1A Lord Auckland Road, Wakefield	10/03/12	48507	Blocked sewer	No overflow	Material build up	Contractor attended
Parker Street, Motueka	12/03/12	48508	Pipe blockage	No overflow	Damage to sewer pipe	Contractor attended

Location	Date	Job Number	What	Overflow	Why	Remedial Action
					when drilling	
Sanderlane Pump Station, Motueka	13/03/12	48544	Pump fault	No overflow	Contractor fault	Contractor attended
Dump Station, Camping Grounds, Collingwood	13/03/12	48534	Pipe blockage	Yes – Unknown discharge	A piece of wood stuck in the line	Contractor attended
21 Tudor Street, Motueka	15/03/12	48594	Pipe blockage	No overflow	Material build up	Contractor attended
10 Coleman Street, Richmond	19/03/12	48644	Blocked drains	No overflow but sewer was backed up into several houses	Material build up	Contractor attended
Corner of Bell and Hunt Street, Richmond	21/03/12	48695	Broken sewer man hole lid	No overflow	Due to wear and tear	Contractor attended, lid was replaced
Motueka Beach front, Motueka	22/03/12	48705	Pump blockage	No overflow	Build up of tree roots	Contractor attended
618 Abel Tasman Drive, Takaka	26/03/12	48763	Blockage in manhole causing odour issues	Yes – small seepage	Due to heavy rainfall	Contractor attended
109 Aranui Road, Mapua	27/03/12	48802	Pump blockage	No overflow	Material build up	Contractor attended
Little Kaiteriteri Pump Station, Little Kaiteriteri	28/03/12	48833	Pump blockage	No overflow	Pump fault reading no flow	Contractor attended, tested and reset

2.3 Wastewater Treatment Plant (WWTP) Compliance

During February 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 plant. Where full compliance was not achieved, the likely factors contributing to the non-compliance event are listed.

WWTP	Compliance	If “no”, What	Why	Remedial Action
Collingwood	Yes			
Motueka	Yes			
Murchison	Yes			
St Arnaud	Yes			
Tapawera	Yes			
Takaka	No	27 March 2012: Median FC of discharge from marsh cells was 6,500cfu/100ml exceeding consent limit of 5,000cfu/100ml. Median TSS of 45g/m ³ exceeds consent limit of 40g/m ³ . Single samples of 70g/m ³ TSS exceed consent limits of 60g/m ³ .	High loading	Compliance notified
Upper Takaka	Yes			

2.5 Capital Projects

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

2.6 Mapua Wharf Wastewater Pumpstation Upgrade

Ching Contracting has continued work on the Mapua pumpstation site. Some delays have been incurred due to archaeological finds and the associated processes required by the Historic Places Trust. The project should be completed by 9 August 2012.

3. Water Networks

3.1 Operations and Maintenance

The majority of the urban water supply networks have performed well. Downer have completed the additional summer weekly readings on the water supply networks over the November 2011 to April 2012 period and submitted the data in a prompt and efficient manner. The readings are captured every Monday morning over this period. Downer have delivered the complete information on time including public holidays.

3.2 Water supply exceptions are noted in the table below:

Location	What	Why	Remedial Action
Waverley Street, Richmond	Burst 100mm AC main.	Fragile Pipe	New section of pipe fitted.
Paton Road, Hope	Leak in 25mm HDPE pipe. damaged Waimea East Irrigation 375mm AC main.	Pipes laid close together.	Repaired both pipes.
Beach Road, Richmond	Burst 150mm AC main	Fragile pipe	New section of pipe fitted.
Dovedale	Low reservoir alarm. Leak could not be found. Most of scheme out of water.	Leak found on Notts Line on Tuesday 24 April 2012 and fixed. Pulled joint on glued PVC main. New section of pipe fitted	New section of pipe fitted.
Upper Takaka	Burst 80mm pipe beneath hydrant.	Poor quality pipework.	Hydrant removed as adequate coverage from next hydrant only 70m away.

3.3 Water service connections were as follows:

- Two in Richmond
- One in Waimea
- One in Motueka
- One in Dovedale
- One in Mapua

3.4 Capital Projects

3.5 Detailed design continues on the pipe reconfiguration and treatment process as well as on the proposed site for the Richmond Water Treatment Plant. An independent peer review of mechanical design and process elements of the design is underway.

- 3.6 Downer continue to make steady progress toward the completion of the Water Meter Renewals contract. Work is now well underway in Tapawera, and all work is scheduled for completion by the end of June 2012.
- 3.7 The contract for improvements to the Pohara Valley water supply has been awarded to Fulton Hogan, and work has commenced. The work is partially sited within a Cultural Heritage Precinct and a temporary delay has been incurred due to the process in securing HPT consent. The physical work is expected to be completed prior to the end of June 2012.

4. Stormwater Networks

4.1 Operations and Maintenance

Downer carried out pre-storm checks and operated the Motueka floodgates as required over the March/April period resulting in the systems being well prepared for any rain events experienced.

- 4.2 There has been significant effort over the March/April period by Downer to get back on track and control vegetation growth on the stormwater network. Audits have highlighted an improvement in this area and all relevant stormwater performance standards have been achieved.

4.3 Capital Projects

The Ruby Bay Stormwater contract (Tait Street and Stafford Drive – Ching Contracting) is now complete. The further separable portions to the contract that were being considered will not proceed this financial year. Minor repairs to the new outfall and open channel above the new work are scheduled over the coming month.

- 4.4 The Patons Rock stormwater contract has been awarded to Ching Contracting and work is to commence on 5 June 2012. The contract includes pipework ranging from 300mm to 450mm in diameter as well as the stream outfall.
- 4.5 Flood recovery work in Bill Wilkes Reserve is largely complete. The work was completed by Tasman Civil and included repairs to the concrete spillway, recontouring of ground levels and recovery of material suitable for bulk fill. The fill material remains on site in the meantime and will be removed for use at a suitable site in the coming financial year.
- 4.6 Following damage over the December 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 the upcoming financial year.

- 4.7 A land purchase agreement has been signed for a portion of land adjacent to Swiftsure Street, Collingwood. Consent has been granted for improvements to the stormwater and road reserve in this area and tenders will be called for this work shortly.

5. 2011 Flood Event – Pohara Infrastructure

5.1 Pohara Water Supply

5.2 Pohara Camp Ground

Council had an agreement with Fonterra to provide treated water (compliant with the Drinking Water Standards) to the Pohara camp ground from late December 2011 until after Easter 2012. Without the assistance of Fonterra the camp ground would probably have had to have been closed for this period. The water was provided at no cost to Council or the camp ground. A letter of appreciation has been sent to Fonterra (Appendix 1).

5.3 Pohara Valley

The Pohara Valley water supply was inundated with silt and rocks during the flood event of December 2011. The intake has been excavated and was found to be mainly intact. Although some damage remains, the intake dam structure was made operational quite quickly after the event.

- 5.4 Silt was found throughout the main treatment plant facility. The pumps were uplifted and dried, filters were cleaned and the silt removed. The facility was operational by early January 2012.

- 5.5 Although the water quality was not satisfactory, water was able to be used by Council's contractor to clear debris from the reticulation.

- 5.6 Reticulation at Lower Pohara Valley Road was washed out and a number of private water connections and water meters were destroyed. All reticulation repairs had to be undertaken so that consumers could get water.

- 5.7 During this period when the water reticulation was out of action and the treatment plant was not operating, Fonterra ensured that potable water was available with the provision of two tanks. Again this water and the tanks were provided at no cost.

- 5.8 By Easter 2012 the water treatment plant was operational and it is providing water that meets the New Zealand Drinking Water Standards.

5.9 Future Water Supplies – Pohara Valley and Pohara Camp Ground

An upgrade of the water supply is needed. However the water source is now affected by silt during any small fresh.

5.10 A contract to provide additional storage for treated water has been let to Fulton Hogan. It is proposed to provide additional storage of 135 m³ (6 x 22.5 m³) initially. Presently there is storage in Pohara of approximately 135 m³. The total storage of 270 m³ will provide sufficient storage for the 51 properties connected to the water supply. A further three storage tanks may be installed later.

5.11 Stormwater

Flooding and debris flows have caused major problems within the Ligar Bay, Pohara Valley and Pohara and Selwyn Street catchments.

5.12 Generally all systems are now operational, however they are very vulnerable to blockage and failure. A number of water courses still have silt adjacent to them and within the catchment.

5.13 Assessments of most of the water courses/drains/reticulation and the “tomas” has been undertaken.

5.14 In some cases it will be several years before the final solution will be constructed.

6. Telemetry

6.1 The analogue telemetry network has performed well during this reporting period.

6.2 To overcome the data capacity limitations of the base station server, the Council's Information Services staff are securing the upsized server licence to allow further sites to be added to the digital system.

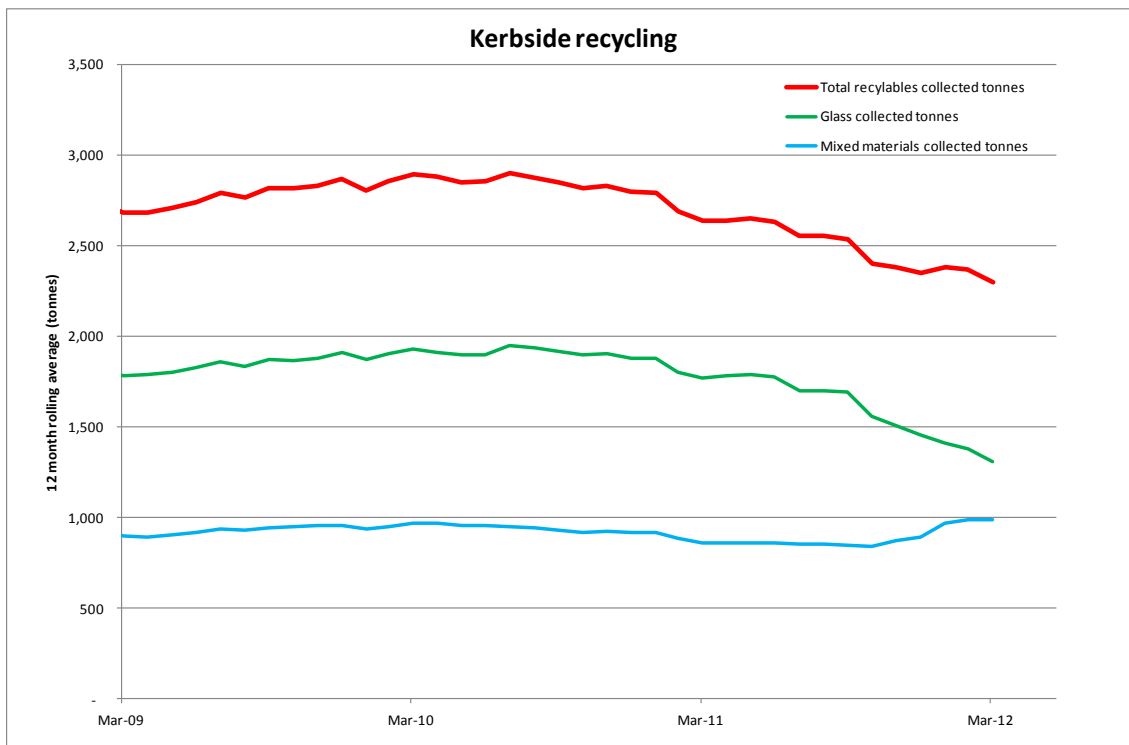
6.3 The Waimea emergency bores are now integrated into the digital telemetry network. This enables better control of the flow from the bores during regular testing and monitoring.

7. Solid Waste

7.1 Kerbside Recycling and Bag Collection

Kerbside collections continued through the period with the contractor performing well.

7.2 Kerbside recycling volumes have now steadied from earlier falls. Analysis indicates recent reductions have primarily been due to falling glass volumes. Council will be working with the contractor to identify how to further encourage diversion of glass from landfill.



7.3 A strategy meeting was held on 2 April 2012 between Smart Environmental Ltd, MWH and Council, with senior management from all parties attending. The meeting proved very positive with Smart Environmental proposing several cost saving measures. Council staff will be working with the contractor to agree and implement savings that will not affect levels of service.

7.4 Resource Recovery Centres

Waste tonnages at Resource Recovery Centres are now tracking slightly above budgeted levels, with modest increases at Richmond and Mariri (5% and 2% respectively) and significant decreases at Takaka and Collingwood sites (12% and 23%). Income for the year to date is at 98% of budget and staff continue to work with the contractor to close the gap between expected and actual income.

7.5 Expenditure at some sites is tracking above budget due to unexpected maintenance and operational requirements, and cost fluctuations above budgeted levels. In many cases over the last two months the gap between budgeted and actual expenditure has narrowed.

7.6 Construction of a recycling loop at Mariri is now complete and operational trials at Mariri RRC have been completed with the contractor opting for an “apple crate and open top Huka bin” option, which will be implemented over the next month.

7.7 Key performance indicator scores at RRC sites for March and April were consistently high with a marked improvement at Collingwood. A series of unexpected staff absences led to the closure of the Collingwood site for one day in April. Staff are working with the contractor to ensure adequate staff coverage at Golden Bay sites in the future.

7.8 Recent work on the compactor at Takaka has improved operations, and recent data indicates improved tonnages per bin at this site. Installation of new site signage at Mariri, Takaka, Collingwood and Murchison is scheduled for May and June as well as other minor civil and mechanical works.

7.9 Closed landfills

Capital works at the closed Rototai landfill (Golden Bay) remain deferred as the long term future of the site is considered in light of flood events.

7.10 Eves Valley Landfill

The new telemetry system has been commissioned at Eves Valley and is working well with only a few minor calibration and labelling corrections to be made. General levelling of the landfill has also continued with front-face bund construction proceeding on both the western and eastern sides.

7.11 Waste from the Mapua Wharf Sewer Pumping Station upgrade continues to be received with a total of 1048 tonnes landfilled in March and April. Further material is expected in May and June.

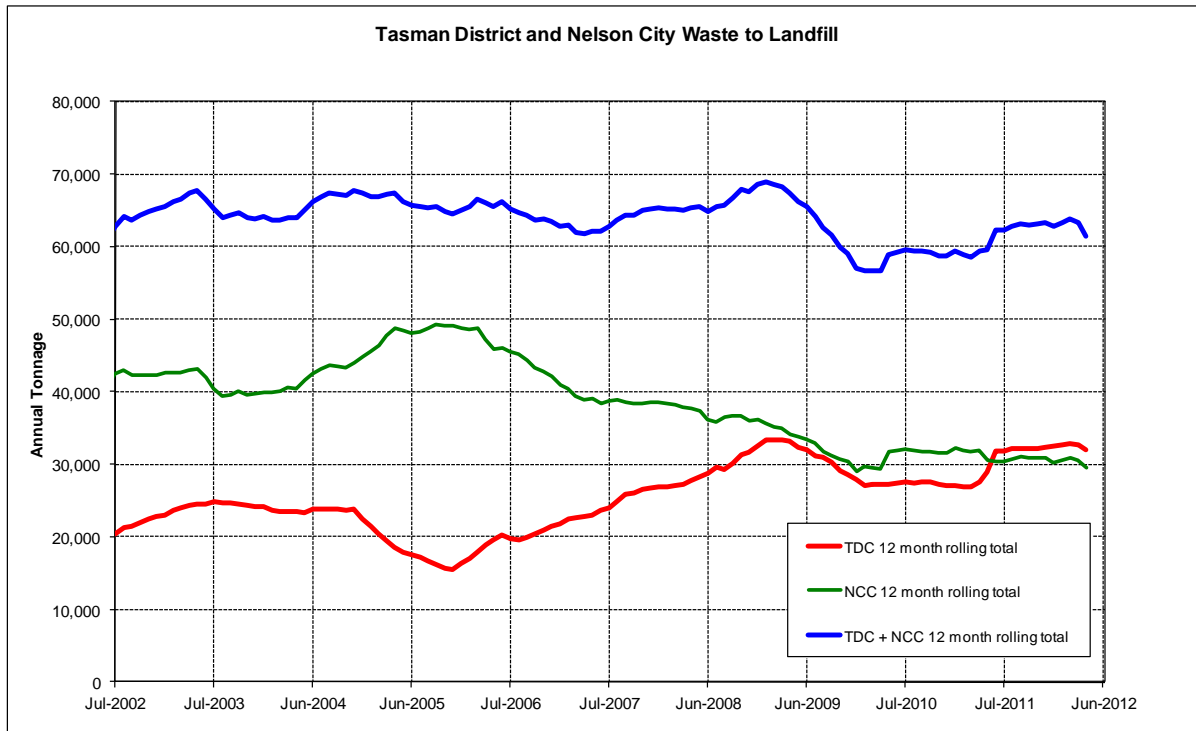
7.12 Data for the first half of the year indicates landfill tonnages at Eves Valley are now on target for the year with the material from the Mapua pumpstation significantly increasing special waste tonnages. Expenditure at this site is above budgeted levels due to additional operating and monitoring requirements, but the additional income from the Mapua pumpstation is expected to offset some of these costs.

7.13 Regional Waste Minimisation

The Joint Waste Management and Minimisation Plan adopted by the Committee at the last meeting was also adopted by Nelson City Council on the same day, and has become operative.

7.14 Over the coming weeks staff will be meeting with Nelson City Council to schedule and prioritise joint activities proposed over the coming year. Staff will also be contacting iwi organisations to invite nominations for the joint waste working party. It is proposed to bring nominations for membership of the working party to the next meeting of the committee with a meeting of the working party expected in September or October.

7.15 Waste education in Tasman schools has been delivered over the last four months by Council staff through the Enviroschools programme. Over this period Council staff have also been working with Nelson City Council to consider changes in the methodology for delivery of waste education. The work has centred on “behavioural change” which represents a shift in approach and has potential for more effective outcomes.



8. Tenders

The following tenders have been awarded since the April meeting:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	Council estimate	Budget for this item	Comment
833	Richmond East High Level Reservoir Access Road	8	Ferguson Brothers Ltd	\$822,559	\$1,088,891	\$910,000	\$1,656,187	Tender accepted. Award of Separable Portion 2 of contract delayed until road legalisation is finalised.
867	Patons Rock Stormwater Upgrade	3	Ching Contracting Ltd	\$132,604	\$160,837	\$91,960	\$250,000	Tender accepted. Prices received reflect location of contract works.
874	Pohara Valley Water Storage Tanks	3	Fulton Hogan Ltd	\$175,818	\$215,100	\$196,150	NIL*	Invitation only tender. *Recovery – refer to separate report.

9. Recommendation

9.1 That the report be received.

10. Draft Resolution

10.1 THAT the Engineering Services Committee receives the Utilities Report RESC12-06-07.

Appendices

Appendix 1 – Letter from Mayor Kempthorne to Fonterra – 14 May 2012