

Report No:	RESC12-03-06
File No:	
Date:	29 February 2012
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 15 March 2012
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: Utilities Report

EXECUTIVE SUMMARY

This report provides a summary of the Utilities activities for January-February 2012.

Of particular note was the performance of the contractor Downer whose staff provided excellent response, dedication and ownership of the network issues experienced during and after the extreme weather events of mid- and late-December 2011.

Despite the weather events and ongoing related issues in January and February, Downer performed well 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.

Capital projects are generally on track but priority, timing and expenditure requirements are being reassessed due to the flooding events of December.

RECOMMENDATION

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Utilities Report, RESC12-03-06.

Report No:	RESC12-03-06
File No:	
Report Date:	29 February 2012
Information Only – no decision required	

Report to: Engineering Services Committee
Meeting Date: 15 March 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 MWH carried out audits across all areas of the utilities network on both ongoing and completed work. Downer has provided an excellent response and ownership of network issues during and after the extreme rainfall events in December and continued to maintain their normal duties in spite of additional issues.
- 1.3 Downer continues to perform well on the general reactive and proactive work within the contract as they have now completed the second quarter of the 2011/12 financial year.

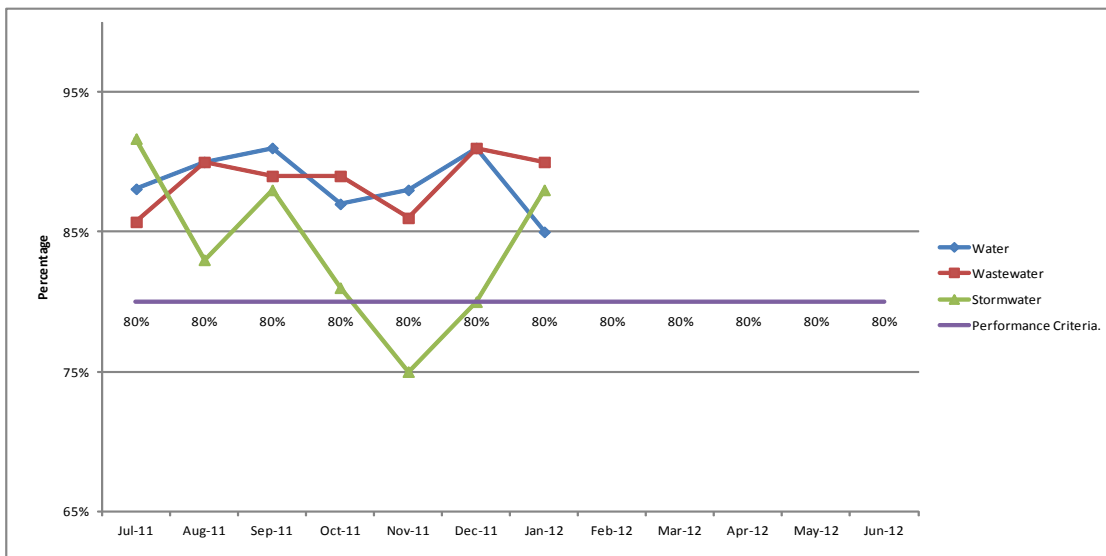
1.4 Contractor Performance and Performance Standard Measurements Monitoring

1.5 Audits

As required under Contract 688, MWH undertook a random selection of audits on various portions of the Water, Wastewater and Stormwater networks over the December/January period. These are summarised below.

	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%					
Wastewater	86%	90%	89%	89%	86%	91%	90%					
Stormwater	92%	83%	88%	81%	75%	80%	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.



1.6 Contract 688 Overall Performance Standard Summary

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	Red	Green	Green					
Water Supply Network	Green	Green	Green	Green	Red	Green	Green					
Wastewater Network	Green	Green	Green	Green	Green	Green	Green					
Stormwater Network	Green	Green	Green	Green	Red	Green	Green					

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

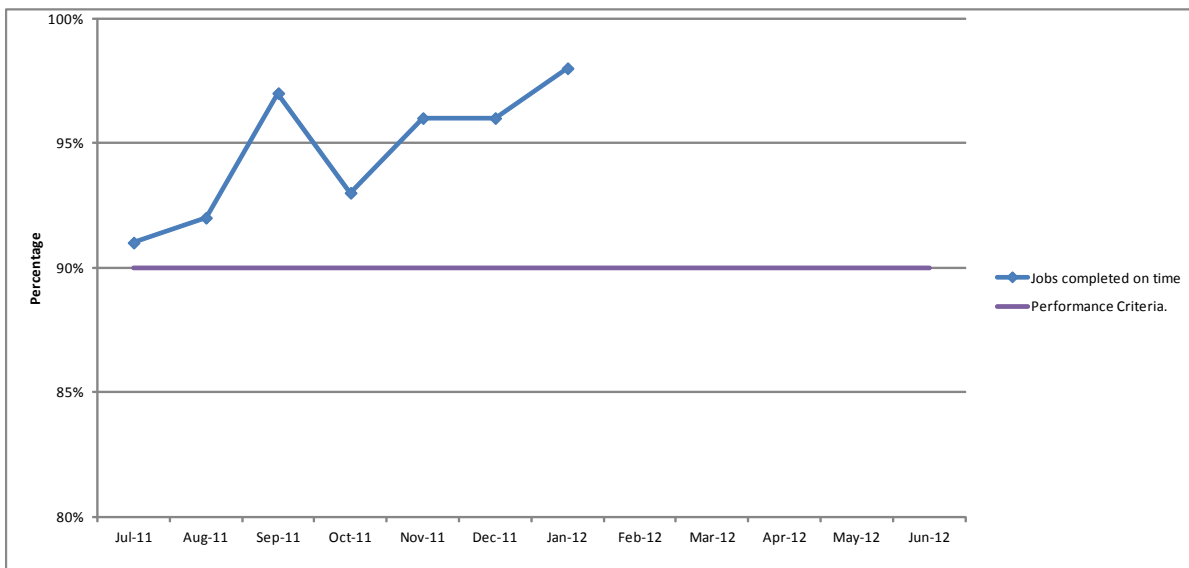
Date	Reason	Amount Deducted
Oct-11	Numerous weekly exception and sewer overflow reports not recieved on time	\$1,201.65
Oct-11	Upper Takaka UV plant out of operation for 2 to 3 days, could have been avoided with more pro-active maintenance.	\$1,969.99
Nov-11	Somwater maintenance score of 75% on assets audit in November 2011, excess vegetation / weed growth in the SW channels.	\$843.92
	Total Deductions to date 2011-2012	\$4,015.56

1.7 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 98% for January 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%						
Performance Criteria.	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	

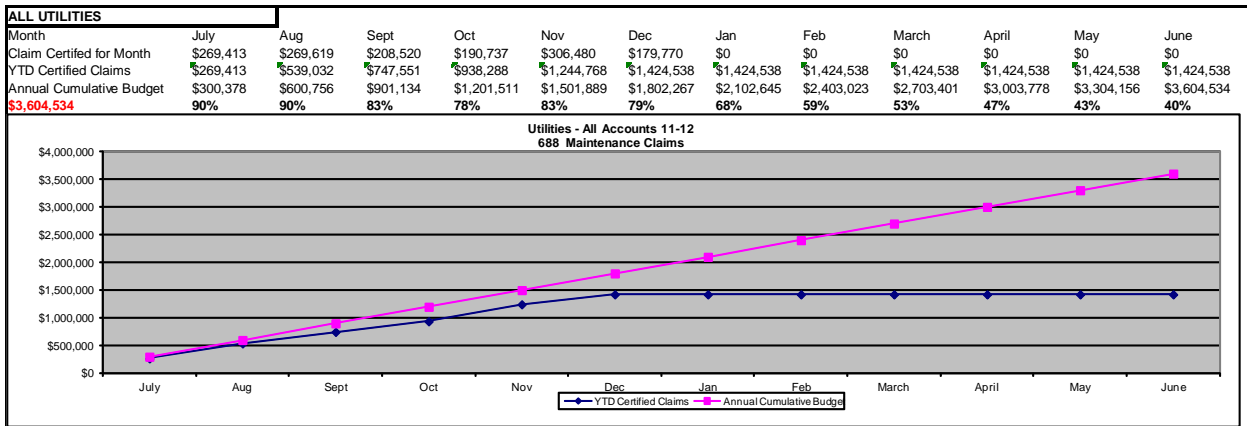
Tasman District Councils' customer service job completion on time target = minimum of 90%



1.7 The above data confirms that the contractor has been able to maintain the required response times during and following the rainfall event.

1.8 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 December 2011 as the January 2012 claim is currently being assessed and processed. It is likely once the work involved during the rainfall event is claimed the total will be in line with the budget.



2. Wastewater Networks

2.1 Operations and Maintenance

The majority of the wastewater networks have performed well during the last reporting period, particularly during and following the flooding events in December.

2.2 While Pohara suffered damage to the sewer system and many overflows occurred in Richmond and Pohara, the overall effects in the remainder of the networks were minimal and tidy up works of isolated incidents were completed.

2.3 More recently the wastewater reticulation systems received additional loadings of silt and gravels. These are of particular concern with regard to reduced flow capacity within the sewer pipes or causing damage to pumps.

2.4 The contractor was proactive in the cleaning of pumpstations and there appears to be fewer ongoing sewer blockage issues since the flooding events.

2.5 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
Pohara Holiday Park Abel Tasman Drive	04/1/12	47183	Sewer overflow	Yes	Broken sewer due to storm event.	Attended by contractor, volume discharged not defined.
Pohara Valley Road	04/1/12	47180	Broken Sewer		Broken sewer	Repaired by contractor
Bay View Road, Kaiteriteri	04/1/12	47204	Odour complaint		undefined	On-going investigation.
3 Kotare Place, Kaiteriteri	05/1/12	47214	Static from electrical equipment at pump station		undefined	Attended by contractor.
18 Somerville Lane, Brightwater	05/1/12	47218	Sewer overflow from station	Yes		Under investigation
Whites Road, Richmond	09/1/12	47305	Sewer overflow.	Yes	Blockage due to root intrusion	Attended by contractor
688 Abel Tasman Drive	09/1/12	47296	Burst sewer main.	Yes	Due to storm event	Attended by contractor, unsure of volume discharged.
240 Thorp Street, Motueka	10/1/12	473212	Pump blockage.	No	Caused by raggage (blockage due to rags)	Attended by contractor.
Collingwood Pump Station	13/1/12	47452	Pump blockage.	No	Caused by raggage	Attended by contractor.
70 Chelsea Ave	18/1/12	47542	Sewer blockage.	Yes	Blockage cause by firewood	Attended by contractor, steady overflow but unsure of volume discharged.
Mapua Leisure Park	21/1/12	47598	Sewer overflow	Yes	Broken pipe	Attended by contractor, duration of overflow 4.5 hours and 1m ³ removed by Sepclean.
50 White Road, Richmond	23/1/12	47627	Sewer blockage.	Yes	Blockage at cleaning eye	Attended by contractor, Only a trickle but unsure of volume discharged.
Port Tarakohe	23/1/12	47630	Sewer overflow.	Yes	Phase failure at pump station	Attended by contractor, duration of overflow 8.5 hours, unsure of volume discharged
Port Tarakohe	23/1/12	47619	Sewer overflow.	Yes	Pipe break caused by contractor	Attended by contractor, duration of overflow 0.5 hours, estimated discharge 5m ³ .

2.6 Wastewater Treatment Plant (WWTP) Compliance

During November-December environmental and performance monitoring was routinely undertaken at all Council WWTPs.

2.7 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 event are listed.

WWTP	Compliance	If "no", What	Why	Remedial Action
Collingwood	No	10 Jan 2012 - Concentrations of total suspended solids (59 g/m ³) above limit (limit is 50 g/m ³) at UV discharge.	High loading	Council Compliance notified Retests planned awaiting results
Motueka	No	11 Jan 2012 – BOD ₅ (160 g/m ³) above limit (limit is 150) at oxidation pond discharge. 17 Jan 2012 – Concentrations of total suspended solids (240g/m ³) above limit (limit is 150) at oxidation pond discharge. Concentrations of faecal coliforms (1,400,000 cfu/100mls) above limit (limit is 500,000) at oxidation pond discharge.	High loading	Tasman District Council Compliance notified Retest undertaken. Compliance achieved.
		Numerous dates in early Jan 2012 – odour complaints received.	High loading and carbon filter not operating correctly.	Serviceman attended site to ensure carbon filter operating correctly.
WWTP	Compliance	If "no", What	Why	Remedial Action
St Arnaud	No	5 Jan 2012 – concentrations of faecal coliforms (62,000 cfu/100mls) above consent limit (limit is 50,000).	High loading.	Council Compliance notified Retests planned awaiting results.
Tapawera	Yes			
Takaka	No	5 and 7 Jan 2012 – concentrations of total suspended solids (ranging from 65 – 100 g/m ³) above limit (limit is 60) at marsh cell discharge.	High loading and high algae growth.	Compliance notified Retest planned awaiting results.
Upper Takaka	Yes			

2.8 Capital Projects

Sewer renewal contracts for Motueka have progressed well. Courtney Street and Grey Street works have been completed. Work has commenced on the final length along High Street.

2.9 Mapua Wharf Wastewater Pumpstation Upgrade

Ching Contracting commenced work on site on 1 March 2012. The project is expected to be largely completed by 30 June 2012.

3. Water Networks

3.1 Operations and Maintenance

The majority of the urban water supply networks have performed well.

3.2 Downer has installed seismic valves and associated pipework and chambers at the Valhalla Lane reservoir site as part of improvement works under the 2011/2012 renewals programme and are still awaiting the installation of the control cabinet. Delays have been caused by other priority works.

3.3 The Pohara Valley water supply continues to experience water quality issues with each heavy rainfall. Planned improvements to the Pohara water reservoirs are now on hold and the supply system is subject to an assessment of future supply options following the damage from the flooding event.

3.4 Proactive water meter replacements have commenced along selected streets. Programmed work is complete in Motueka and now underway in Richmond.

3.5 Summer water supply monitoring has commenced and water use is relatively stable. With the ongoing periods of rain the level of demand has not reached its typical summer peaks at this stage.

3.6 Water supply exceptions are noted in the table below:

Date	Location	What	Why	Remedial action
5 Jan	Stafford Drive, Mapua	150mm AC main break	Unknown	New section of pipe installed
12 Jan	Best Island	200mm PVC Mapua Trunk Main break	Unknown	Repair completed

3.7 Water service connections were as follows:

- One in Brightwater
- One in Pohara
- Three in Richmond
- One in Mapua

3.8 Capital Projects

Tenders for the reservoir site and access road closed and the tender has been awarded to Ferguson Brothers Contracting. It is intended that the earthworks be undertaken this financial year. The notice of requirement for land designation has also been approved.

3.9 Detailed design continues on the pipe reconfiguration and treatment process as well as on the proposed site for the Richmond Water Treatment Plant.

3.10 Industrial Water Users

Arbitration to resolve the supply agreement dispute between Council and the three major industrial water users (Nelson Pine Industries, Alliance Group and ENZA Foods) has been set down for the week of 2 July 2012.

4. Stormwater Networks

4.1 Operations and Maintenance

January 2012 was a relatively dry month with few significant rainfall events occurring. This was ideal weather for the ongoing clean up of many of the stormwater assets affected by the 14–16 December flood event, and there are ongoing investigations into longer term impacts of damage to the networks.

4.2 Pre storm checks were undertaken prior to the rainfall event on 12 January 2012.

4.3 Capital Projects

The Ruby Bay Stormwater contract (Tait Street and Stafford Drive – Ching Contracting) is now completed. There are further separable portions to the contract that are being considered but may not proceed this financial year depending on the outcomes of reprioritisation decisions following the December 2011 rainfall event.

5. Telemetry

5.1 The analogue telemetry network has performed well over the majority of this reporting period. There was a temporary hardware failure of a radio power supply unit following the Christmas period and quick response enabled the system to be brought back online with minimal disruption.

5.2 To continue implementing new digital telemetry sites a radio firmware upgrade has become necessary. The new firmware upgrade device was installed in early January 2012 and is performing satisfactorily and will continue to be monitored.

5.3 The process to utilise Valhalla Reservoir as a repeater site is completed. This has improved the signal strength and reliability in the telemetry network around Richmond, Brightwater, Wakefield, Waimea, Dovedale, Motueka and Kaiteriteri.

6. Solid Waste

6.1 Kerbside Recycling and Bag Collection

Kerbside collections were performed over the summer period with no significant incidents and a timely response by the contractor to almost all service requests.

6.2 Resource Recovery Centres

Waste tonnages for the year to 31 January 2012 are on target overall with increases at Richmond and Mariri Resource Recovery Centres (RRC) and reductions at Takaka, Collingwood and Murchison. Income for the period remains on budget.

6.3 Further to the last report to the committee on 2 February 2012, damage to Resource Recovery Centres during the 15 December 2011 rainfall event was limited to flood damage at the Takaka RRC but this was minimised by quick actions of the site operator leading up to the event. Electrical and mechanical equipment was relocated prior to the event and has been reinstated at a higher level. Further work is scheduled to reduce the risk of flooding in further events.

6.4 Construction of a recycling loop at Mariri commenced in late January and is nearing completion. The new loop will separate recycling from waste disposal and is expected to improve waste diversion and safety for site users. Minor remedial drainage works have also been completed to capture several identified leachate sources.

6.5 Site development plans have now been completed for the Murchison, Takaka and Collingwood RRC sites and minor capital works are scheduled for the last four months of the year. These works will include electrical and mechanical renewals (Takaka) and minor site improvements.

6.6 Closed landfills

Capital works to improve erosion protection and capping of the closed Rototai landfill (Golden Bay) have been deferred as the site is being used for a spoil disposal area following the December rainfall. A proposal is currently being developed to incorporate this spoil into the proposed capital works.

6.7 Minor maintenance to other closed landfills is scheduled over the next three months, as part of the closed landfill maintenance programme.

6.8 Eves Valley Landfill

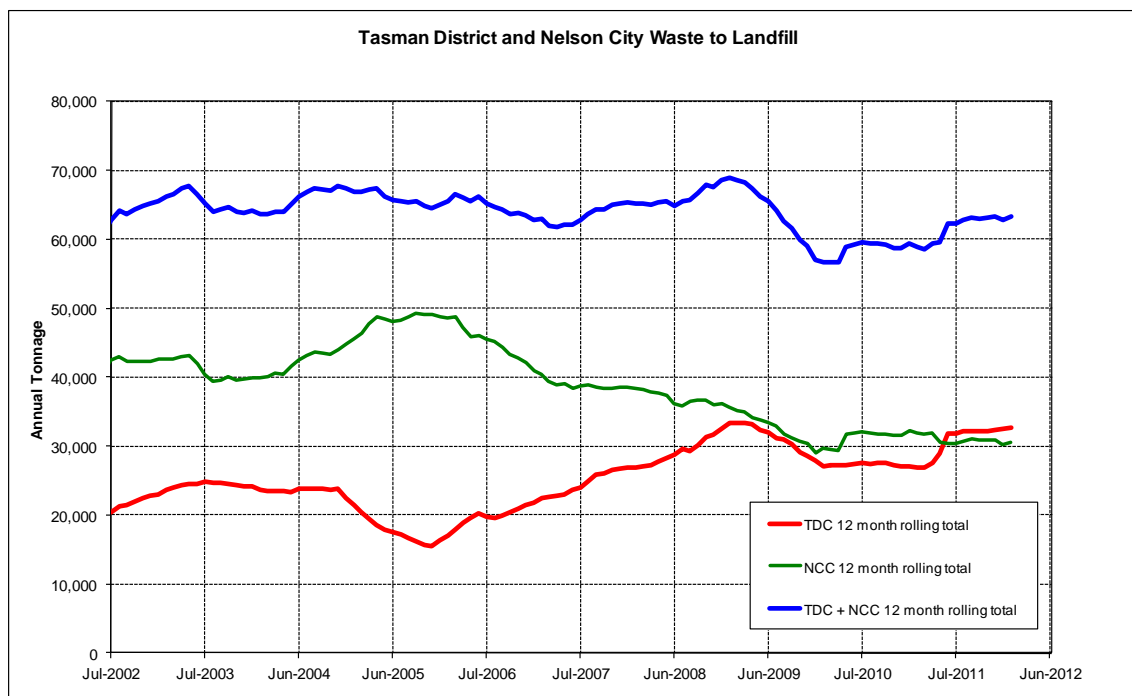
Further to information provided to the committee on 2 February 2012, some damage occurred at the Eves Valley landfill during the rainfall event of 15 December 2011. Activity on site since this event has included repairs to the access ford and the stormwater ponds and installation of telemetry for the leachate and stormwater systems. A trial of flocculation of the stormwater ponds has commenced. Further work is programmed to consider improvements to the leachate disposal systems.

6.9 Data for the first half of the year indicate landfill tonnages at Eves Valley are on target for the year, and tracking slightly over those from the same time last year. Special waste tonnages are expected to increase in the coming months with disposal of around 1500 tonnes of excavated material from the Mapua wastewater pump station.

6.10 Regional Waste Minimisation

The proposed Nelson-Tasman Joint Waste Management and Minimisation Plan (JWMMP) was released for public consultation on 9 December 2011 and the period for submissions closed on 31 January 2012. A total of 17 submissions were received.

6.11 Members of the joint waste working party will consider submissions at a hearing scheduled for 19 March 2012. It is expected that the working party will report back to the Nelson City Council on 5 April 2012 and the Engineering Services Committee on 26 April 2012 with any recommended amendments to the JWMMP.



7. Swiftsure Street Stormwater

7.1 A general concept of what is required in relation to acquiring land to provide legal access and concreting the steep section of Swiftsure Street has been discussed on site with the landowner and Cr Norriss.

7.2 Council is in the process of applying for the appropriate consents to:

- Improve the stormwater drainage and pipework;
- Construct a retaining wall; and
- Lay a concrete surface on the steep section of Swiftsure Street.

7.3 Once the consent has been obtained a formal offer will be made to the landowner to acquire the land to legalise the road and a contract tendered to provide the improvements.

8. Motueka Water Consent – Environment Court Hearing

8.1 Council's case to extract 16000 m³ of water per day from the Motueka Plains to supply Motueka and the Coastal Tasman Area was heard in the Environment Court over three days in late February. It is expected that a decision will be made in several weeks time.

8. Tenders

8.1 Tenders recently awarded are as below.

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	Council estimate	Budget for this item	Comment
863	Richmond RRC Supply of New Compactor Bins	1	BJ Scarlett Ltd	\$74,276.00	\$74,276.00	\$80,000	\$37,138 Richmond \$37,138 Takaka RRC	Additional 2 bins supplied by Contract 811 supplier

9. Recommendation

9.1 That the report be received.

10. Draft Resolution

10.1 THAT the Engineering Services Committee receives the Utilities Report RESC12-03-06.