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Date:	14 October 2011
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services Committee
Meeting Date: 27 October 2011
Report Author Jeff Cuthbertson, Utilities Asset Manager
Subject: **Utilities Report**

EXECUTIVE SUMMARY

This report provides a summary of the Utilities activities for July-August 2011.

Overall the contractor Downer performed well and undertook all proactive, routine and non-routine maintenance on the water/wastewater treatment plants, pumpstations, reservoir sites and stormwater assets as scheduled.

In solid waste operations, contractors are generally performing well with some challenging conditions due to recent construction activities and wetter than normal weather.

Capital projects are generally on track.

RECOMMENDATION/S

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Utilities Report, RESC11-10-11.

Report No:	RESC11-10-11
File No:	
Report Date:	7 October 2011
Information Only – no decision required	

Report to: Engineering Services Committee
Meeting Date: 27 October 2011
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, pump stations, 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. In the majority of cases Downer have performed well and achieved their performance-based payments.
- 1.3 Downer continues to perform well on the general reactive and proactive work undertaken within the contract as they have moved into the 2011/12 financial year. The information provided below indicates that the contractor has started off the year in a positive manner and continues to maintain the assets to a high standard.

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	■	■										
Water Supply Network	■	■										
Wastewater Network	■	■										
Stormwater Network	■	■										

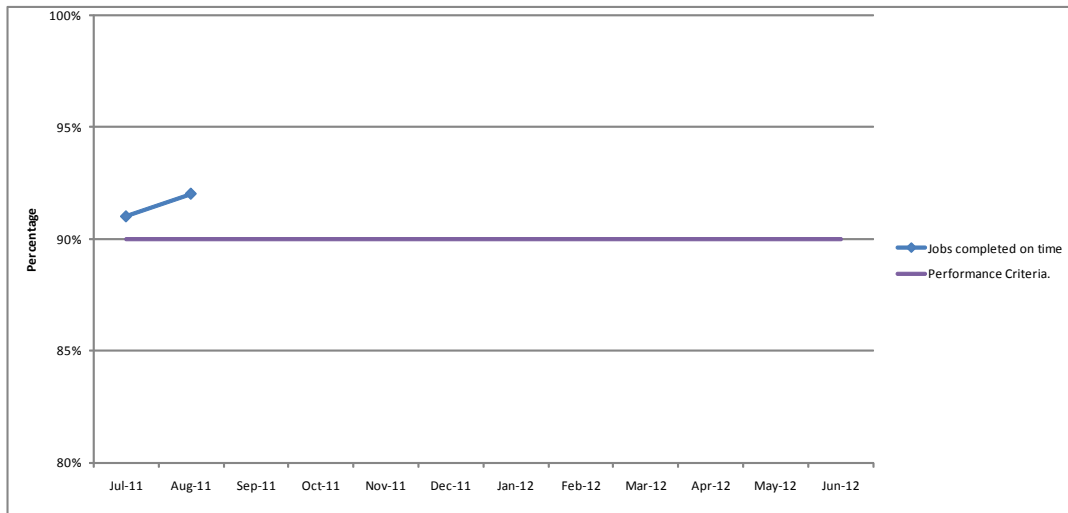
Key: ■ Passed appropriate Performance Standard in accordance with C688
 ■ Not achieved appropriate Performance Standard in accordance with C688

1.4 Customer Services - Job Completion

Targets and requirements under Contract 688 are for the contractor to achieve 90% or above for completion of allocated jobs on time. The contractor has achieved 91% for July and 92% for August 2011.

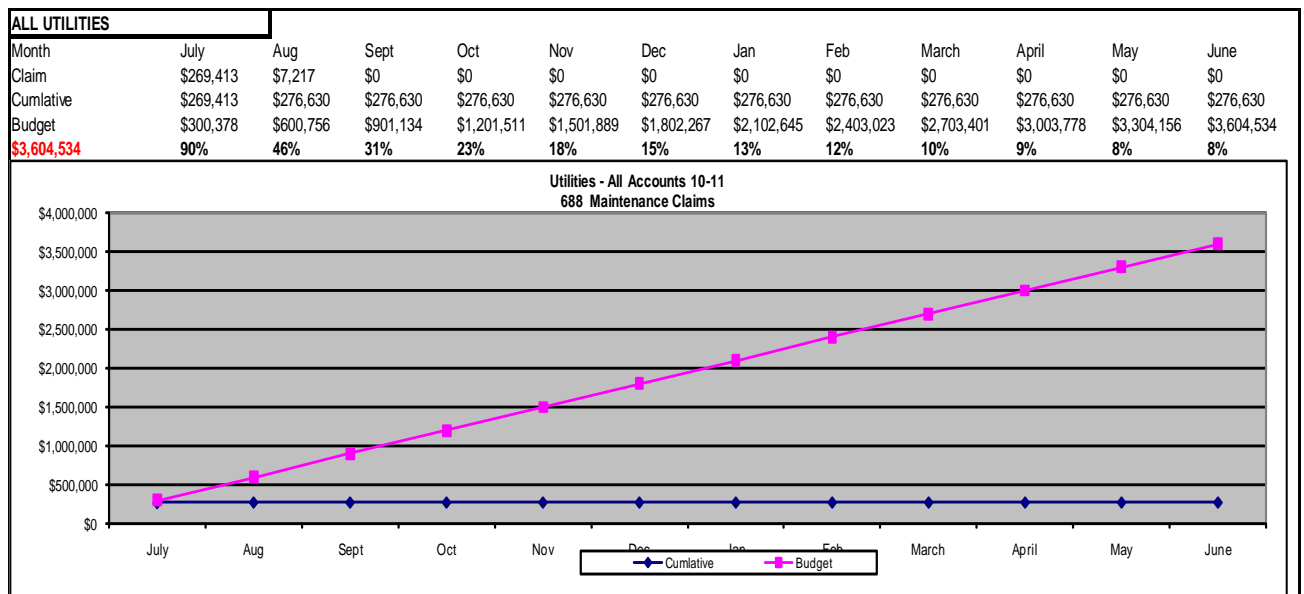
Contract 688 Performance Measurement scores achieved July 2011 to June 2012 - Jobs completed on time													
	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	
Jobs completed on time	91%	92%											
Performance Criteria	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%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

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



1.5 Financial Performance

As shown in the graph below, the overall Utilities expenditure is only available up to the end of July 2011 as the final August costs were unavailable.



1.8 For the next few months, the contract claim will be processed via two parallel systems as the new mobile system is fully implemented.

2. WASTEWATER NETWORKS

2.1 Operations and Maintenance

The majority of the wastewater networks have performed well during the last reporting period, and the lower levels of natural groundwater have resulted in less inflow and infiltration and few issues at treatment plants.

2.2 During this period environmental and performance monitoring was routinely undertaken at all Tasman District Council operated Wastewater Treatment Plants (WWTPs).

2.3 The wastewater reticulation system has on the whole performed well with the majority of pipe breaks and or blockages being minor.

2.4 Wastewater Exceptions

As the table below indicates a large proportion of the sewer pipe breaks and blockages occurred in Richmond and Motueka and were unrelated.

Date	Location	What	Why	Remedial action
07 Jul	107 Old Wharf Road, Motueka	Sewer overflow	Pump blockages	Investigations are underway. There were 0.5 hrs of leakage with a volume of 0.5 m ³
11 Jul	22 Clover Road	Burst 225 mm PVC sewer		There was 2 hrs of leakage, the volume unknown
15 Jul	66 William Street, Richmond	Blocked pipes		CCTV used to investigate. No overflow
21 Jul	69 Oxford Street, Richmond	Sewer overflow	Pipe blockage	Blockage cleared by contractor. There was 10 minutes of overflow, the volume unknown
27 Jul	Gladstone Road, Richmond	Pipe blockage		Pipe unblocked by contractor. No overflow
01 Aug	Gladstone Pumpstation, Richmond	Sewer overflow at Gladstone pump station	No obvious blockage	Cleared out by contractor, this may require further investigation if it was to happen again. Minimal overflow, volume unknown.
05 Aug	15A Motueka Quay	Sewerage coming up and out of manhole	Blockage at pump station	Pumps unblocked by contractor. There were 0.5 hrs of leakage with a volume of 1 m ³
05 Aug	19A Kingston Place	Sewer blockage		CCTV being used to investigate, No overflow
05 Aug	217 Thorp Street, Motueka	Blocked Pumps	Pump failure	Pumps unblocked. There was 1 hr of leakage with a volume of 0.5 m ³

2.5 A timed sprinkler system installed in the Malthouse Crescent/Waimea West wetwell and connecting discharge manhole has minimised odour issues resulting from leachate discharged from the Eves Valley Landfill.

2.6 Minor improvement works have been undertaken on the Motueka WWTP infiltration basin to improve the flow and retention times prior to discharge.

2.7 Wastewater Treatment Plant Compliance

2.8 This reporting period includes 28 Jun to 15 Sep 2011. During this period, environmental and performance monitoring was routinely undertaken at all Tasman District Council operated Wastewater Treatment Plants (WWTPs).

2.9 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 discussed below.

WWTP	Compliance	If “no”, What	Why	Remedial Action
Collingwood	No	<ul style="list-style-type: none"> 1 Jul 2011 – 500 litres of wastewater discharged without UV treatment 18 Aug 2011 - 150 litres of wastewater discharged without UV treatment 	<ul style="list-style-type: none"> Power outage 	<ul style="list-style-type: none"> Compliance and shellfish operators notified Automated valve to shut off flow during power/UV outages to be installed
Motueka	No	<ul style="list-style-type: none"> Wastewater discharging intermittently into the Motueka River from northern part of wetland 	<ul style="list-style-type: none"> High rain/groundwater causing infiltration into sewer system 	<ul style="list-style-type: none"> Sewer repairs in most susceptible areas undertaken Flowpath through soakage area diverted to allow for higher retention time prior to overflow Compliance notified
Murchison	Yes			
St Arnaud	Yes			
Takaka	Yes			
Tapawera	Yes			
Upper Takaka	Yes			

2.10 Capital Projects

Sewer renewal contracts for Motueka have progressed well. Works through Lowe Street and north along High Street have commenced and are due to be completed by mid-December. The sewer renewals along York Street and Boyce Street are near completion. Moffat Street is likely to commence early in 2012.

2.11 The contract for the Murchison Wastewater Pumpstation Upgrade is also progressing well. Work on the Hotham Street and Waller Street pumpstations is

near completion and the rising main portion including the bridge section, is yet to commence. All work is expected to be completed by the end of November.

2.12 The Pohara Sewer Gravity Main Upgrade contract has been progressing well with Ching Contracting on track to complete work in private property prior to Labour Weekend.

2.13 Mapua Wharf Wastewater Pumpstation Upgrade – Tenders for the contract close on Wednesday 19 October, and submissions will then undergo evaluation. The required Resource Consents for the work have been granted.

2.14 Fulton Hogan have nearly completed the replacement of the discharge drainage at the Murchison Wastewater Treatment Plant.

3. WATER NETWORKS

3.1 Operations and Maintenance

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

3.2 Improvements to the Pohara water intake structure were undertaken in August including a new screen and a roof over the intake and settlement chambers.

3.3 Downer have installed seismic valves and associated pipework and chambers at the Richmond Queen Street reservoir site as part of improvement works under the 2011/2012 renewals programme.

3.4 The temporary pipe-bridge over the Dove River that supplies the Dovedale rural water scheme is working very effectively under the current demand. We are working on a permanent solution which is programmed to be in place by the end of November 2011 in time for the summer period of high demand. The chlorine injection pump has also been relocated to a new chamber outside the control building to safeguard the electronics should a pipe break occur again, as well as isolating and reducing the ambient operating level of pump noise.

3.5 Water Supply exceptions are noted in the table below

Date	Location	What	Why	Remedial action
10 Jul	Richmond – Hill Street	100 dia AC main break	Old pipe	Repaired with new section of pipe
24 Jul	Mapua – 190 Stafford Drive	150 dia PVC main break	Fragile pipe	Repaired with new section of pipe
25 Jul	Gladstone Road/Church Street corner	75 dia main break	Old pipe	Repaired with new section of pipe

Date	Location	What	Why	Remedial action
10 Aug	Motueka – Thorp Street	200 PVC main break	Fragile pipe	Repaired with new section of pipe
25 Aug	Murchison – Fairfax Street	150 dia AC main break	Fragile pipe	Repaired with new section of pipe
8 Sep	Richmond – 20 Hillplough Heights	No water at certain times of day	House is at elevation of 100 m, too high for reliable supply. Issue thought to be head loss through 150 mm section of main from reservoir	Pressure logger investigation has been done Main upgrade proposed
14 Sep	Waimea – Wells 6 and 7	Pumps faulty	Under investigation	Pumps lifted for appraisal
15 Sep	Mapua – Best Island	200 dia PVC main break	Fragile pipe	Repaired with new section of pipe
19 Sep	Mapua – Stafford Drive	200 dia PVC main break	Fragile pipe	Repaired with new section of pipe

3.6 Water service connections were as follows:

- two each in Mapua and Dovedale
- five in Richmond
- one each Best Island, Murchison and Motueka, and
- two in 88 Valley.

3.7 Capital Projects

Land negotiations for the Richmond East Reservoir and pipework have continued. Alternative access options have been investigated and evaluated. Resource consents and detailed reservoir design also continue.

3.8 Investigation work on the proposed site for the Richmond Water Treatment plant has commenced. Consultation with major water users about the proposed changes to water consistency is also underway.

4. STORMWATER NETWORKS

4.1 Operations and Maintenance

July 2011 saw a tapering off of rainfall throughout the region and August was a particularly dry month. Precautionary storm checks were undertaken as required and the Motueka Floodgates were operated once during July.

4.2 Routine maintenance undertaken on drains throughout the region has been to an acceptable standard. The contractor will focus attention on controlling vegetation growth over spring to ensure assets are suitably maintained.

4.3 Capital Projects

Ruby Bay Stormwater (Tait Street and Stafford Drive) – Ching Contracting continue to make steady progress on this contract. The special watermain diversion installation was successfully carried out on 11 October and no issues were reported. The works are expected to be completed by mid-December.

4.4 Kotare Place Stormwater Upgrade project – tenders closed on 12 October and are currently undergoing evaluation.

5. TELEMETRY

5.1 Analogue telemetry – The network has performed well over this reporting period.

5.2 The base station has operated well over the past six weeks. Server software needs to be updated. Council's IT department and contractors are planning the work so that there will be minimal impact on the operating system.

5.3 New digital sites are coming on-line in Murchison in conjunction with wastewater pumpstation upgrades at Hotham and Waller Streets.

5.4 To continue implementing new digital telemetry sites a radio firmware upgrade has become necessary, as new radios come with a firmware that is not compatible with older radios in use in the network. To avoid numerous site visits and individual firmware upgrading, a new network device will be installed that allows upgrading work to be done via the base-station computer over the network.

6. SOLID WASTE

6.1 Kerbside recycling and bag collection

Management of kerbside operations continues at a high level of performance, with consistently efficient management of customer enquiries. Kerbside recycling quantities have recently been decreasing but quantities of exported material have increased – which appears to indicate an increasing use of drop-off facilities at Resource Recovery Centres.

6.2 Staff will be working with the contractor over the upcoming weeks to prepare for the traditionally busy summer period.

6.3 Resource Recovery Centres (RRC)

Site development at the Richmond RRC is now complete. Both the site contractor (Smart Environmental) and the construction contractor (Fulton Hogan) have worked well to complete the works while maintaining site operations. Several

Councillors had a first-hand look at the site after the September Engineering Services Committee meeting.



Crs Inglis, Dowler and Norriss take a keen interest at the Richmond RRC

- 6.4 A condition assessment of the four remaining compactor bins (used at Richmond and Takaka) has indicated significant repairs and maintenance are required. Three of the bins are 26 years old and the assessment concluded that replacement will be more cost-effective than performing ongoing repairs. Council is working with the compactor and bin supplier to negotiate purchase of four additional bins.
- 6.5 Minor drainage works at the Mariri Resource Recovery Centre are complete, and leachate issues appear to have been resolved. Staff will monitor the site during the wetter spring months.
- 6.6 Tenders for further work scheduled at Mariri are expected to be advertised in November. The works will include the development of a recycling drop-off area on the lower section of the site. This work will separate recycling and refuse drop-off and is expected to improve waste diversion and safety for site users.

6.7 Eves Valley Landfill

Preliminary data for the first quarter of the year indicate landfill tonnages at Eves Valley are on or just below target for the year.

6.8 Stormwater upgrade works have been completed at the landfill site and appear to be performing well. A flocculant system to increase sediment capture is programmed for trial over the coming six months.

6.9 Improvements are also scheduled for the controls of the leachate collection system. Recent improvements have included installation of air-valves and the remaining work is scheduled for completion prior to January.



Eves Valley Landfill stormwater improvements

6.10 Solid waste operations - procurement

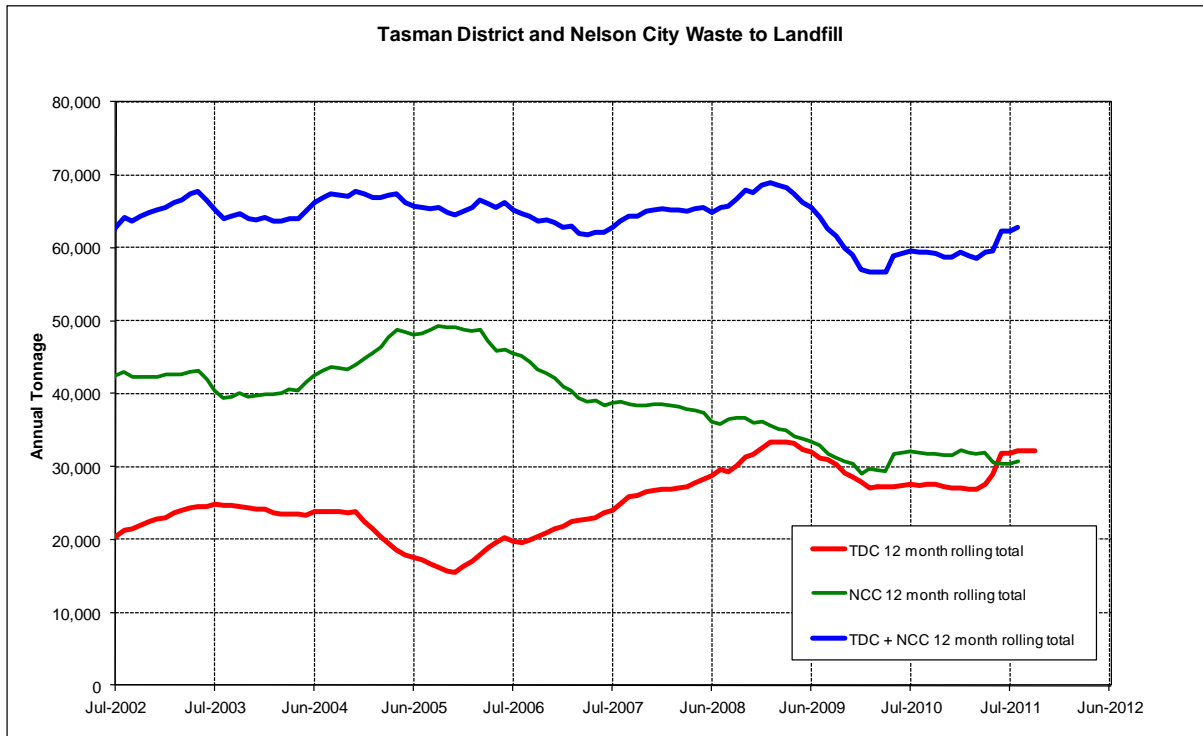
Council's main solid waste operations (kerbside collections, RRC operations, refuse haulage and landfill operations) are contracted out. Each of these contracts conclude on 30 September 2012 although the landfill operations and refuse haulage contract has an option to be extended for two further one-year periods.

6.11 With Council's Joint Waste Management and Minimisation Plan scheduled to be released in November, it is likely to be suboptimal to procure contracts for this work over the next six months. Council is planning to open discussions with contractors to discuss 12- to 24-month extensions of existing contracts, and to also seek expressions of interest from the market for these operations. Staff are planning to bring a paper with recommendations to a future meeting of the committee.

6.12 Regional Waste Minimisation

Members of the joint waste working party recently completed a draft Joint Waste Management and Minimisation Plan (JWMMP) for Nelson City and

Tasman District Councils. The Proposed JWMMP is addressed in a separate report.



7. RECOMMENDATION

7.1 That the report be received.

8. DRAFT RESOLUTION

8.1 THAT the Engineering Services Committee receives the Utilities Report RESC11-10-11.