

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 20 October 2009
SUBJECT: **UTILITIES MANAGEMENT REPORT**

1 UTILITIES GENERAL

Council's utilities maintenance contractor, Downer EDi Water has continued to perform satisfactorily during the last period.

The recent random audits carried out on the networks have indicated the work carried out to be of a high standard and the contractor is achieving required targets through performance-based audit scores. The networks have been maintained and operated to provide a satisfactory level of customer service including during times of adverse weather. Overall, Downer EDi Water has continued to perform well in maintaining Council's assets and is achieving the required levels in customer service requests. The contractor's completion rate of customer service requests on time for the month of September, was 94%, and above the target of 90%.

Monthly contract meetings were held on 16 September and 14 October 2009. Additional meetings were also held in relation to the renegotiation of Contract 688 schedule of rates, as per the requirements of the contract. The contractor is now in the process of providing further detailed information to substantiate any variances in rates as well as a detailed report regarding provision of appropriate as-built information.

Telemetry

The upgrade of the telemetry system continues with the migration of utility sites to the digital network in a controlled and programmed manner. All remaining analogue sites are undergoing a recalibration as well as minor upgrades as required, and transfer to a parallel channel. The programmed upgrade of all sites is expected to be completed this month. A noticeable reduction in the overall volume of data via the primary Mt Campbell channel has been recorded and this continues to improve, along with a steady reduction in communications failures throughout the transition process.

2 WATER

2.1 General

The water schemes continued to operate without significant issues during the last period. Some systems have continued to be affected by minor telemetry communications and equipment failures. Some minor issues have been experienced on rural schemes with pipe bursts still occurring on occasion.

Committee meetings for Redwoods, Dovedale, and 88 Valley Schemes are planned for late October – early November 2009.

A hearing is to be held in relation to the renewal of the 88 Valley Scheme Water Take Consent. The hearing is scheduled for 2 November 2009, and submissions will be heard by the independent commissioner, Brent Cowie.

There are no issues to report in relation to microbiological compliance for all schemes.

- **Dovedale and Redwoods Rural Schemes**

No significant issues were experienced in the rural supply schemes with only a few relatively minor repairs required. Some portions of the rural networks have continued to be affected by minor telemetry communications failures, partially due to the telemetry changeover and upgrade of RTUs at various sites.

The blocking of the in-line filter at O'Connors pumpstation has caused some ongoing issues, with the blockages caused by debris from the aerator tower. A more appropriate strainer has been installed. Similar issues have occurred at Golden Hills pumpstation and are under further investigation for remediation.

Progress towards the replacement of the Redwoods 1 Reservoir continues. Negotiations with the landowner are ongoing to confirm the reservoir layout, and it is still hoped that resolution will be reached so that the reservoir can be reconstructed prior to the summer period.

Other general items of work included:

- Overhaul of Murchison WTP Chlorinator.
- Burst 150mm AC main in Gladstone Road, Richmond and leaks on the associated ridermain in the days following the initial repair.
- Leaks occurred on the 150mm AC main in Dorset Street,= and 100mm main in Waverly Street.
- Burst 200mm main in Fearon Street, Motueka.
- Staff have been involved in investigations into positive bacto results at the Alliance Group's meat processing plant. Ongoing sampling and FAC checks over a period of days found no issues in the Tasman District Council water supply. Alliance Group subsequently found the contamination to be due to internal plant and sampling processes.

2.2 Water Capital Projects

- **Wakefield Reservoir**

Tasman Civil has completed work on the site excavation to base foundation levels. Thelins have completed the concrete ring beam and have begun placing the precast wall panels. Initial issues with the quality of the pre-cast panels have been rectified. Some delays have occurred on the project however the contractor is expecting the final late completion date to be within 2-3 weeks of the original schedule.

- **CTA Reservoirs and Pipelines**

Minor portions of pipework are included in the Ruby Bay Bypass project and are about to be installed in conjunction with the road construction and culvert installation.

Discussions with landowners have taken place in relation to the potential sites for future reservoirs in connection with the CTA project, and initial discussions have been positive. Landscape assessments are also required for each site and are currently being scoped.

- **Richmond Reservoirs**

Specific sites have been identified and chosen based on specific criteria and discussions continue with the landowners of the preferred sites. A geotech investigation on the serviceability implications of the preferred site option has been carried out.

- **Water Renewals Projects 2009/10**

Work has commenced toward portions of the Water Renewals Programme. Water meter replacements and rider-main renewals in Murchison are underway. Considerable planning has been undertaken to determine a suitable cross-section of removed meters for testing to verify the validity of replacement based on decline in accuracy. A small portion of the total being the most recent one-off meter installations, will be recovered and stored for future reuse.

3 STORMWATER

3.1 General

During the months of September and October, significant periods of rainfall continued to occur, in particular on 9-10 and 23-30 September 2009. Some issues were reported and incidents of flooding were recorded in Motueka, Tasman, Mapua and Richmond. Events although typically short-lived were of relatively high intensity. Routine maintenance and proactive maintenance were carried out in accordance with the contract schedule and have reduced the impact of the ongoing high intensity events.

Minor works include:

- A new upper inlet grill in Bill Wilkes detention basin, is soon to be installed.
- Brightwater Underpass stormwater pump was removed for servicing and tested ok.
- Work is progressing on the hydraulic gates adjacent to the Motueka Recreation Centre.
- Investigation continues into the installation of swales and cut-off drain in Bill Wilkes Reserve to prevent runoff and surcharge of groundwater into the adjacent property; 24 Rochfort Drive.

3.2 Stormwater Capital Projects

- **Croucher / D'Arcy / Bird / Elizabeth Streets, Richmond**

Adcock & Donaldson are near completion of this work, including trench surface final reinstatement. The replacement of kerb and channels on the south side of D'Arcy Street has been completed as part of this work and final sealing is currently in progress.

- **Salisbury Road Stormwater Upgrade**

Detailed design is now complete and tender documentation is being prepared with a view to advertising tenders this month and works commencing in November.

Council is undertaking a design of the full length of road but will be advertising tenders for the lower half of the work only. The resurfacing of Salisbury Road has been deferred this year.

- **Seaton Valley Stream, Mapua**

Tenders for installation of an additional culvert through the Toru Street causeway (leading to the Mapua Leisure Park) will close on 21 October 2009. The tender document allows for construction prior to or following the Christmas/New Year holiday season. Once completed this work will improve flushing of the inner estuary and reduce flood hazard upstream.

Council has also reached agreement with upstream landowners to replace two existing culverts in the Seaton Valley Stream (downstream of Stafford Drive). Initial design proposed the construction of two small bridges but subsequent geotechnical investigations have indicated culverts will be required. Tender documentation is being completed and this tender will be advertised in late October with construction proposed between December and February.

Council is continuing to make steady progress with other landowners to negotiate terms for widening of the remaining lengths of the stream below Stafford Drive.

- **Park Drive**

The construction of the culvert under Hill Street and the regrading of the footpath between Hill Street and Riding Grove have been priced. Discussions with impacted property owners continue prior to the work proceeding. Further options on the downstream of the culvert have been investigated however other options are being pursued to reduce the visual impact of works.

No further work in the Park Drive area is planned until the proposed rezoning of the area/catchment is completed. At that time any future proposed work will be included in the next review of the Ten Year Plan.

- **Ruby Bay**

Flood modelling of the Broadsea Avenue – Crusader Drive area is nearing completion. Council's consultant is currently evaluating remedial options with a view to commencing detailed design and advertising tenders for work in the new year.

4 WASTEWATER

4.1 General

All treatment plants were routinely checked during the month and pumpstations cleaned. Random audits of a selection of the contractor's work indicated the quality of work was of a high standard and cyclical maintenance results demonstrated good compliance with their annual programme. There were no reported non-compliance issues during the last period apart from some high flows into Upper Takaka's system during high rainfall events, and some isolated incidences of low dissolved oxygen levels which had no detectable impact on WWTP performance.

General issues include:

- Pohara Valley pumpstation overflowed due to blown control fuses.
- Bursts occurred on 100mm main between Penguin Café and Pohara Motor Camp, and at 100mm main at 619 Abel Tasman Drive and blockages at 718 Abel Tasman Drive.
- Blockages occurred at 32 King Street, 158 Queen Street, and 411 Hill Street, Richmond.
- Both pumps were blocked with rag material at Brightwater pumpstation, causing high level alarms.
- Blockages occurred at 69 Main Road and 34 Matai Crescent, Tapawera.

4.2 Capital works

- **Delaneys Pumpstation and Rising Mains, and Collingwood Motels Pumpstation**

This contract has been awarded to Ching Contracting Ltd. Three conforming and two alternative tenders were received. The tenders underwent a comprehensive evaluation and tender prices were particularly competitive. The winning conforming tender was significantly less than the project estimate and within available budgets. The contractor is due to commence work this month, starting with the Collingwood Motels site.

- **Motueka Sewermain Renewals**

Design work is underway for the portion of sewer renewals to be constructed this financial year. The sewer upgrade will be tendered and constructed in conjunction with the proposed NZTA road reconstruction of High Street from Whakarewa to Tudor Streets. The contract is expected to be tendered this year with construction commencing in February 2010.

- **Takaka WWTP Upgrade**

A pre-hearing meeting was held at the Takaka Service Centre to provide an opportunity for the submitters concerns to be heard. The meeting was attended by Council E&P and Engineering staff, and engineering consultants. Outcomes of the meeting and further requested information has been collated and circulated as appropriate. If the concerns of the submitters can be resolved there will be no requirement for a full hearing. Meanwhile, the negotiations for the purchase of the required parcel of land identified as the preferred site, is ongoing.

5 SOLID WASTE

5.1 Kerbside recycling and bag collection

Kerbside recycling and rubbish bag collection has continued over the period with continuing good performance by the contractor.

Official rubbish bag collections for the first quarter are down 5% on the same period last year, however sales have recently lifted and are running at 101% of the same period last year.

Recyclable collections continue to increase, with the last quarter 11% higher than last year. Most growth has been in glass collections with a 15% increase, and remaining materials growing 4%.

5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period with no significant operational issues. The contractor continues to manage the sites reasonably well although there are some litter issues at some sites.

- **Richmond**

Waste volumes for this site remain lower than last year, running at 91% of the equivalent quarter last year.

Detailed design continues for the upgrade of this site.

- **Mariri**

Waste volumes at this site are steady with volumes tracking at 101% for the equivalent 2008/2009 quarter.

A tender was awarded to Concrete and Metals for the installation of stormwater drainage pipes and a treatment unit. Construction has commenced on site.

Staff are also currently working on a master plan for improvements at this site.

- **Takaka**

This site continues to be managed well, with waste volumes rising in the last quarter.

Staff have worked with the contractor to coordinate construction of the car-parking and roading improvements (for Labyrinth Rocks) at the site entrance.

Staff are also advised that a recent application by the Golden Bay branch of Forest and Bird to the Community Conservation Fund has been successful. This fund is administered by the Ministry for the Environment and \$10,500 has been granted to assist in the removal of weeds from the area and replacement with native species. Staff will meet shortly with Forest and Bird to agree on arrangements.

- **Collingwood**

This site is being managed reasonably well at present with staff working with the contractor to reduce the area utilised, in an effort to minimise litter and enable better control of visitors to the site. Several large gum trees and other vegetation will be removed from the site to improve visibility and reduce risk from falling limbs.

- **Murchison**

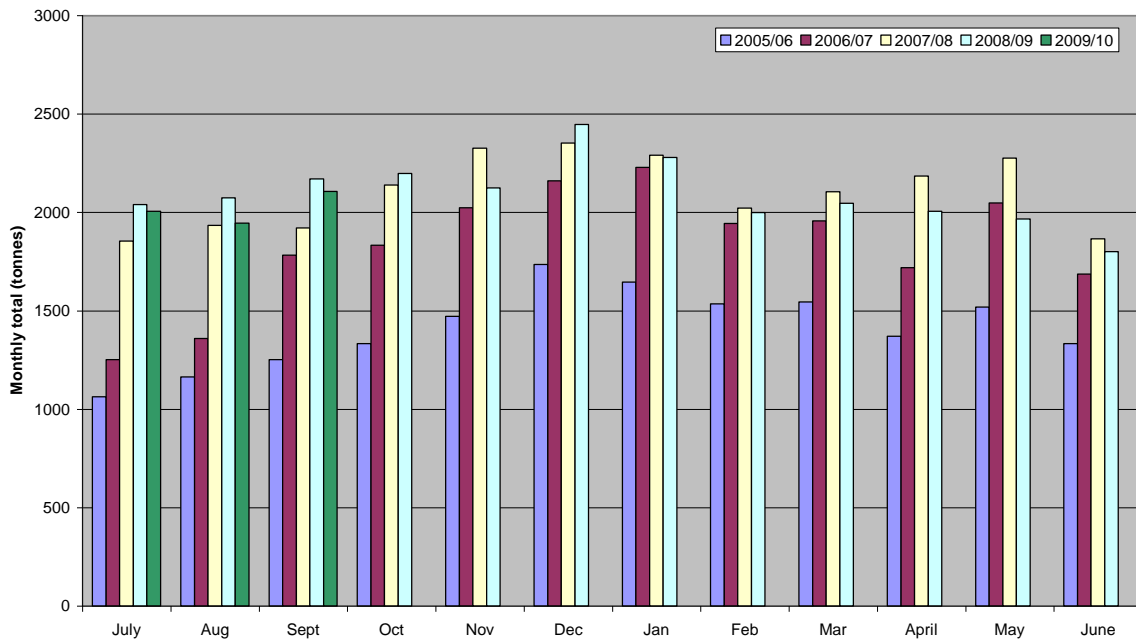
Planning is continuing for landscaping, improved recycling facilities and a number of additional site enhancements for the coming financial year.

This site is managed by Fulton Hogan under a separate contract than the remaining four sites. With waste now being trucked to Eves Valley staff are now able to compare waste management at this site with others.

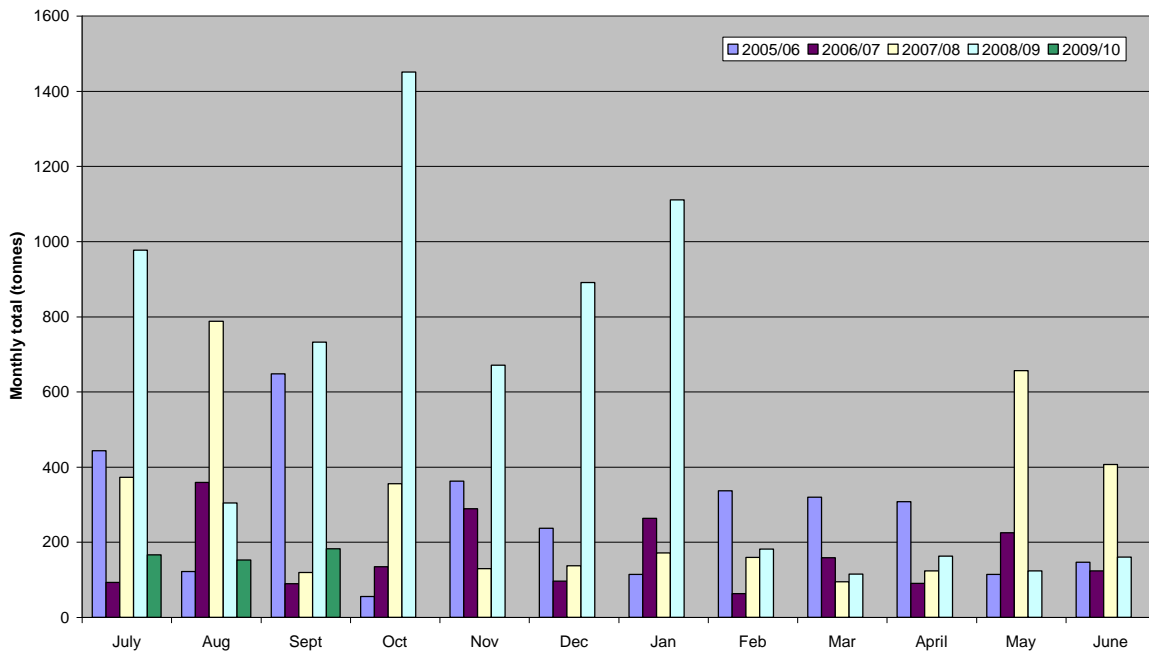
5.3 Eves Valley Landfill

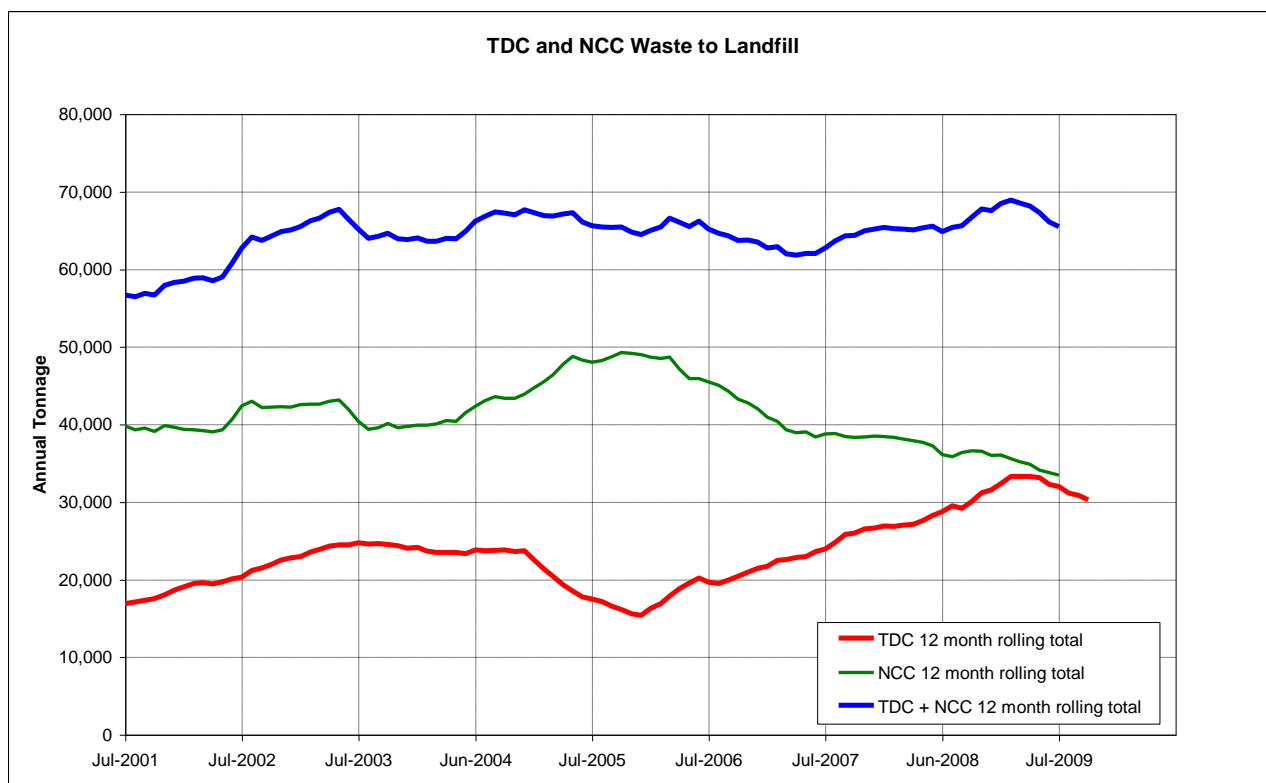
Volumes in waste at this site continue to be less than last year. Tonnages (excluding special waste) for the first quarter are running at 96% of the period last year. Special waste volumes are tracking at below normal levels, and approximately 30% below budget. This waste stream is influenced by one-off events (such as disposal of contaminated soil from industrial sites or residential subdivisions) and staff will continue to monitor activity in this area.

Eves Valley Tonnages (excl Special Waste)



Eves Valley Special Waste Tonnages





5.4 Greenwaste recycling

Council has a contract with Greenwaste to Zero for the provision of greenwaste processing. The contract (Contract 622) was for an initial term of five years, with a right of renewal for a further five years.

Council recently met with the contractor and have been formally advised that the contractor wishes to extend the contract for a further five years, from 19 November 2009. Under the terms of the contract the cost to Council will reduce from this time.

5.5 Waste Minimisation Act 2008 and joint TDC / NCC Waste management plan

Staff have concluded discussions with Nelson City Council on the development of a joint Waste Management and Minimisation Plan (WMMP) and in October engaged Morrison & Low Ltd to complete a joint waste assessment and a separate review of governance in the waste area.

The waste assessment will review existing trends and projected demands for waste in the region and how the councils propose to meet these demands. From the waste assessment a series of key issues and options for consideration will arise.

It is proposed that two Councillors from each council be nominated for membership of a joint Council working party (made up of staff and Councillors). This working party will provide ongoing involvement of Councillors in the development of the waste assessment, and would meet regularly on an informal basis.

Nomination of these Councillors is discussed in a separate paper.

5.6 Waste education

Council staff and the engineering manager have recently negotiated an extension of Contract 651 (Waste Education) for a period of 12 months, terminating on 30 September 2010. The contract extension focuses on delivery of services to schools and businesses.

6 Tenders

The following tenders have recently been awarded:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	TDC estimate	Budget for this item	Comment
754	Delaneys Pumpstation and associated pipelines and Motels pumpstation upgrades	5	Ching Contracting Ltd	\$2,044,478	\$2,157,739	\$2,415,695	\$2,210,000	Contractor commencing Motels site works from late October

7 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager