

## STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee  
**FROM:** Jeff Cuthbertson, Utilities Manager  
**DATE:** 26 November 2009  
**SUBJECT:** UTILITIES MANAGEMENT REPORT

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### 1 UTILITIES GENERAL

Council's utilities maintenance contractor, Downer EDi Works has continued to maintain Council's assets to an acceptable standard.

The recent random audits carried out on the networks have indicated the work carried out to be of a high standard apart from a small number of isolated exceptions, and the contractor is achieving required targets through performance-based audit scores. The contractor's completion rate of customer service requests on time for the month of October was 96%, and above the target of 90%.

Monthly contract meetings were held on 14 October and 18 November 2009. Additional meetings were also held in relation to the renegotiation of Contract 688 schedule of rates, as per the requirements of the contract.

A significant power failure occurred on 19 October 2009 which affected a large portion of the District. Staff were mobilised to ensure critical assets were checked and operational where standby power generation was available. With the Richmond office powered by backup generator staff were able to monitor the majority of the network via the telemetry network throughout the outage.

- **Telemetry**

The upgrade of the analogue telemetry system is now complete and the subsequent reduction in communication failures and reduction of data traffic to the anticipated 50% level means that the system is able to report pump station technical issues far more readily. Problematic sites are now able to be targeted for remedial upgrade work or minor adjustments to optimise operations and further reduce communication errors.

### 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 communication 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 planned for November have yet to occur.

A hearing was held on 2 November 2009 in relation to the renewal of the 88 Valley Rural Water Scheme Water Take Consent. The evidence from Council (the applicant) and

submissions were heard by the independent commissioner, Brent Cowie. The commissioner's report and council decision is expected to be available this month.

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

- **Dovedale and Redwood Rural Schemes**

No significant issues were experienced in the Dovedale rural supply scheme with only a few relatively minor repairs required.

The blocking of the in-line filter at O'Connor's pumpstation has continued to cause some ongoing issues, with the blockages caused by debris from the cable duct in the contact tank. Minor holes in the contact tank have been filled and no further issues have been experienced.

Progress towards the replacement of the Redwood 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 as soon as possible.

**Other general items of work included:**

- Overhaul of Golden Hills pump station chlorinator.
- Burst 125mm main on 88 Valley intake line was caused by a landslip.
- Large scale power outage temporarily affected supplies in Tapawera and Murchison
- Leak on the 200mm main in Fearon Street, Motueka was repaired.
- Collingwood WTP went into low level due to a lockout of high-lift pumps.
- Supply issues occurred at Maiseys Road and Westdale Road due to blockages at O'Connors.
- Leak detection in Mapua and Tapawera is complete.
- Systematic repair of major leaks has commenced in Tapawera and then Mapua, following leak detection.

## **2.2 Water Capital Projects**

- **Wakefield Reservoir**

Thelins have finished the concrete ring beam and almost completed placing the precast wall panels. Initial issues with the quality of the pre-cast panels have been rectified. Some issues continue with the quality of the concrete infill between panels, portions of which have been removed for rework. Some delays have occurred on the project however the contractor is expecting the final late completion date to be within 3-4 weeks of the original schedule.

- **CTA Reservoirs and Pipelines**

Portions of pipework included in the Ruby Bay Bypass project have been installed in conjunction with the road construction and culvert installation.

- **Richmond Reservoirs**

Specific sites have been identified and chosen based on specific criteria and discussions continue with the landowner of the preferred site. Further geotechnical investigation on the serviceability implications of the preferred site continues both near the reservoir location and along the proposed pipeline alignment.

- **Water Renewal Projects 2009/10**

Work has commenced on portions of the Water Renewal 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 month of November no rainfall events of significance have occurred or caused issues. 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 has been installed.
- Work is progressing on the hydraulic gates adjacent to the Motueka Recreation Centre.
- Investigation continues into the installation of swales and a cut-off drain in Bill Wilkes Reserve to prevent runoff and surcharge of groundwater into the adjacent property at 24 Rochfort Drive.

#### **3.2 Stormwater Capital Projects**

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

Adcock & Donaldson have attained Practical Completion of this work including trench surface final reinstatement. The replacement of kerb and channels on the south side of D'Arcy Street has also been completed.

- **Salisbury Road Stormwater Upgrade**

Detailed design and tender documentation is now complete and the contract is currently out for tender. Tenders close in early December and it is hoped the tender will be awarded prior to the Christmas break.

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

- **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 affected property owners continue prior to the work proceeding. Further options downstream of the culvert have been investigated to reduce the visual impact of works.

- **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 an acceptable 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 a significant leak from the Collingwood wastewater treatment plant which is reported separately.

General issues include:

- Bursts occurred on the 100mm main at 519 and 540 Abel Tasman Drive and blockages at Tata Heights/Cornwall Place intersection.
- Blockages occurred at 22 Edward Street, 158 Queen Street and 411 Hill Street, Richmond.
- System blockages occurred at the main Brightwater pumpstation and near Bryant Road, Brightwater; adjustments at the pumpstations have resolved the issues.
- An overflow occurred at Old Wharf Road due to high effluent level at 13 Trewavas Street pumpstation; due to high levels of infiltration and dilution
- Various power outages, planned and unplanned were managed and pumpstations monitored throughout. Some telemetry sites have been prioritised for back up battery power.

### 4.2 Capital works

- **Delaneys Pumpstation and Rising Mains, and Collingwood Motels Pumpstation**  
Ching Contracting Ltd continue to make steady progress on this contract. The Collingwood Motels upgrade work is substantially complete with some pumpstation fitting out work yet to be completed. A substantial portion of the gravity sewer main in Abel Tasman Drive has also been completed. The contract does not permit the contractor to work within the roadway over the peak holiday period so during this time the contractor will focus on off-road work including pump station completion.

- **Motueka Sewermain Renewals**

Design work is complete 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 starting in February 2010.

## 5 SOLID WASTE

### 5.1 Kerbside recycling and bag collection

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

Staff are working with the contractor to prepare for the usual busy holiday time ahead.

## 5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period, but with some issues which are being worked through with the contractor. Management of litter and site tidiness is being given continued attention with ongoing improvements.

As noted in the last report, waste trends indicate a decline on previous years' volumes and income falling below current budgets. Council staff are closely tracking these trends and saw a recovery in October towards last year's quantities, but still below projections for this year. Staff and Council's consultant are also conducting random audits of sites to ensure fair and accurate charging.

- **Richmond**

Waste volumes at this site have recovered over the month of October, and were tracking at 98% of the October 2008.

A design for a new layout at this site has now been agreed. Detailed design will proceed, with the intent to advertise tenders for the works in the new year.

- **Mariri**

Waste volumes at this site continue to track upwards with October volumes at 103% of the previous year.

During installation of stormwater drainage pipes and a stormwater treatment unit on site it was discovered that the cap of the old landfill on site was substantially less than expected. Additional clay fill has been added and the site re-contoured using material obtained on site. The existing septic tank disposal was also investigated during construction and staff are working on an alternative design for this site.

- **Takaka**

This site continues to be managed well with waste volumes for October stabilising at 104% of the previous year.

Staff have worked with the contractor to coordinate construction of the car-parking and roading improvements (for Labyrinth Rocks) at the site entrance. The contractor is also working with members of the Golden Bay branch of Forest and Bird to manage noxious weeds on site and the neighbouring Labyrinth Rocks.

- **Collingwood**

Several large gum trees and other vegetation will be removed in the coming month and staff are investigating additional fencing to better manage and secure the site.

- **Murchison**

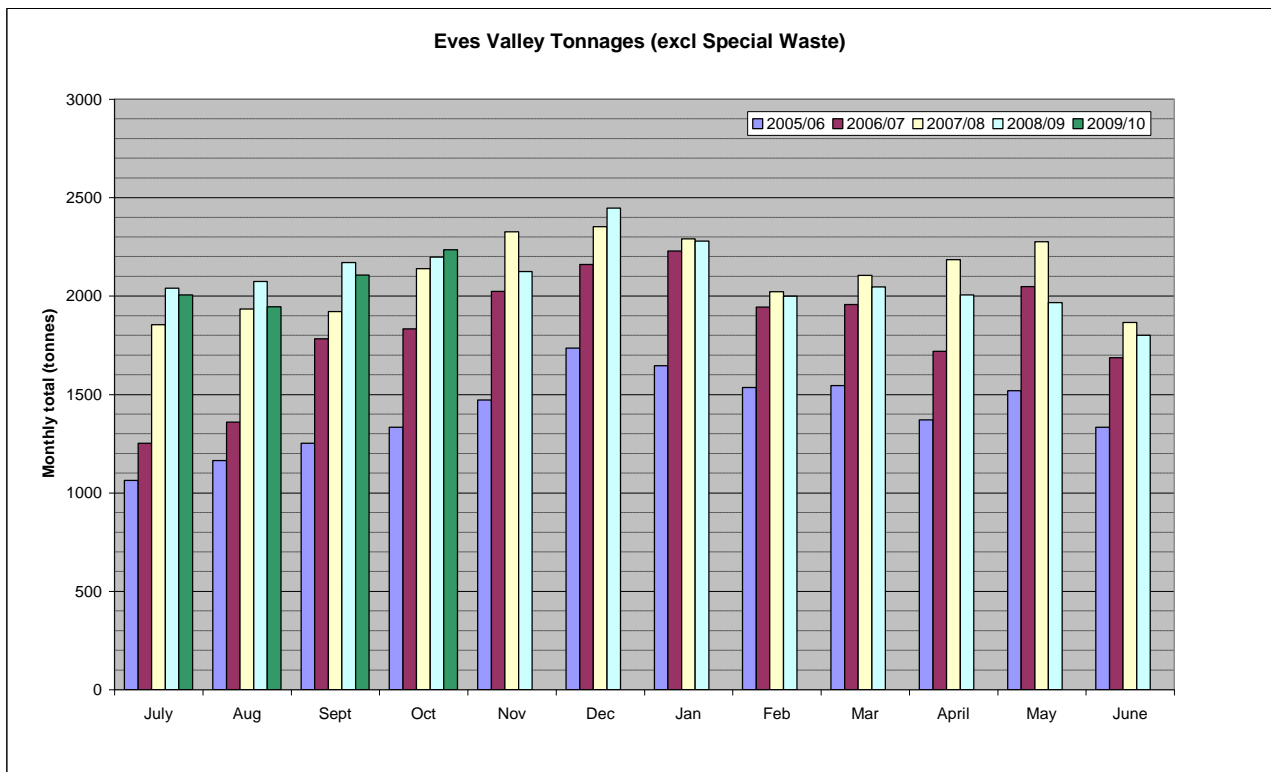
Waste volumes for this site are steady following historical seasonal patterns.

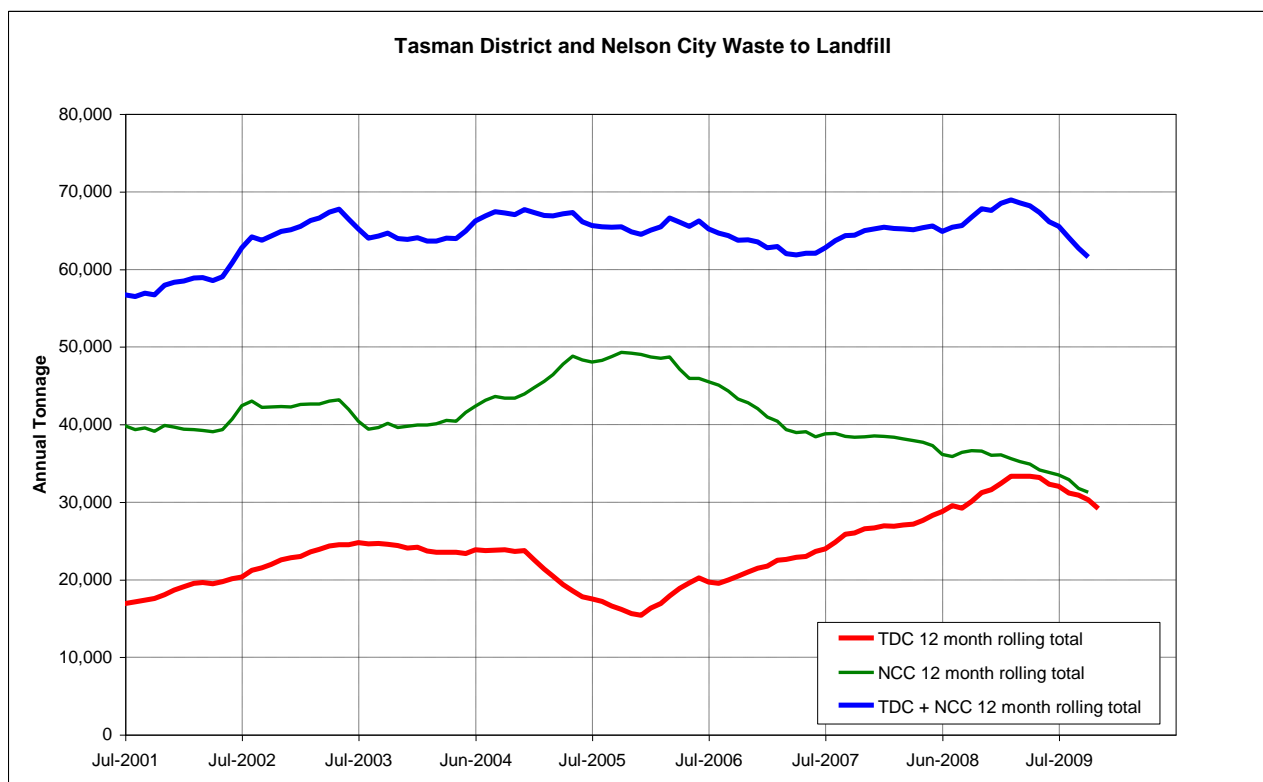
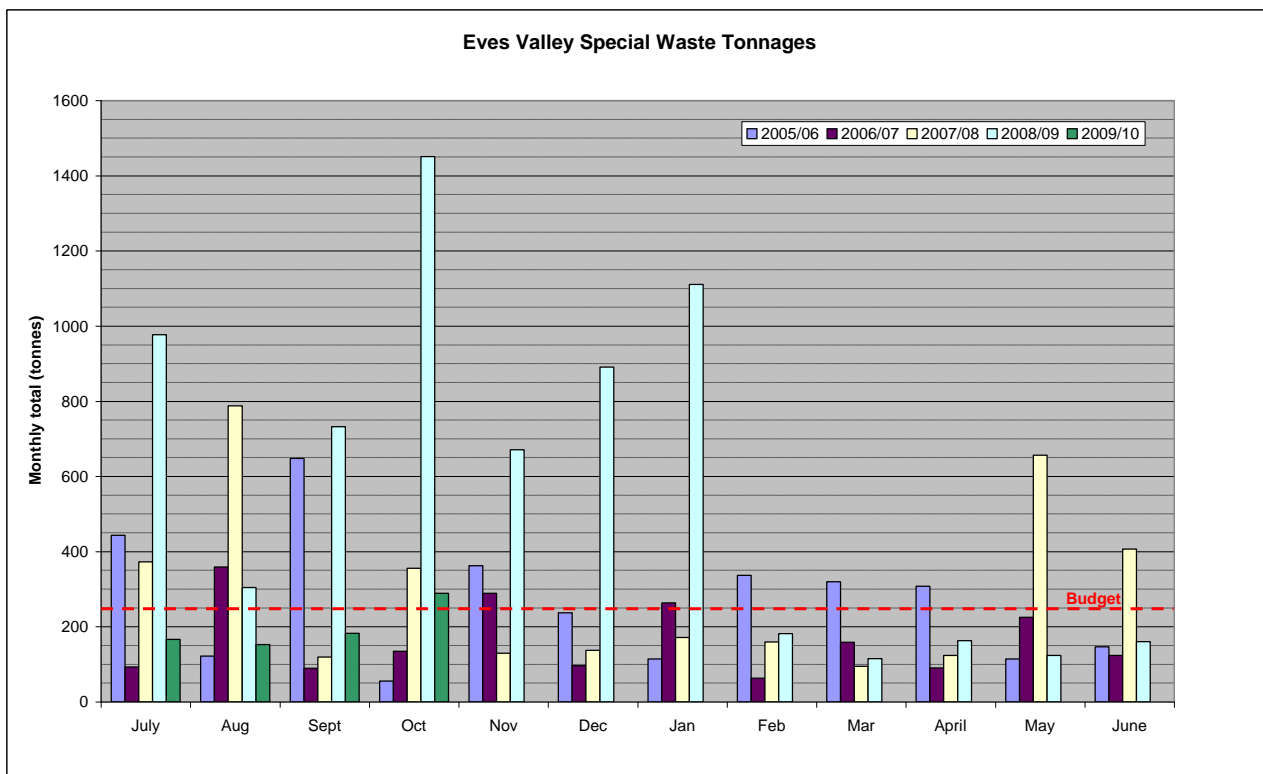
Ongoing improvements are planned at this site including better recycling and waste oil facilities. Landscaping is programmed for the coming autumn.

### 5.3 Eves Valley Landfill

Volumes in waste at this site have increased over the month of October, with totals for the month at 110% of October last year. Special wastes in particular increased in the last month, and exceeded the monthly budget for the first time in nine months. Staff will continue to track volumes closely.

Council’s consultants are currently preparing a tender document for landfill operations and refuse haulage. We expect to advertise tenders in January, closing late February for a term of two years with potential for extension for two further periods of one year.





## 5.4 Waste Minimisation Act 2008 and joint TDC / NCC Waste management plan

Development of a joint Waste Assessment and a review of governance options for solid waste have commenced. This is the first stage in the development of a joint waste management and minimisation plan with Nelson City Council.

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.

Two Councillors from each council will be nominated for membership of a joint Council working group. The elected members for Tasman District Council are:

- Cr Barry Dowler
- Cr Stuart Bryant

Nelson City Council will be nominating their two representatives at their Council meeting on 15 December 2009.

It is hoped that the working group will meet before Christmas to discuss work completed to date. A draft Waste Assessment is expected in January with a review of governance options to follow shortly after.

## 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  |
|-----|---|----------------|----------------------------|-----------|----------------|--------------|----------------------|--|
| 762 | Mapua Causeway Modifications                  | 4              | Tasman Civil Ltd           | \$129,700 | \$264,145      | \$187,640    | \$316,395            | Budget carried forward from 2008/09 for this and other works |
| 776 | Wakefield to Hope Trunk Sewer Flow Monitoring | 3              | ADS Environmental Services | \$64,810  | \$94,045       | \$94,520     | \$150,395            |  |

## 7 WELCOME

I would like to welcome Gavin Hutchison (Utilities Asset Engineer) to the team. Gavin's background is in water and wastewater issues and he has joined the team from Beca Infrastructure in Christchurch.

## 8 RECOMMENDATION

**THAT the report be received.**

Jeff Cuthbertson  
**Utilities Asset Manager**