

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 12 January 2010
SUBJECT: **UTILITIES MANAGEMENT REPORT**
Report prepared for meeting of 21 January 2010

1 UTILITIES GENERAL

Council's utilities maintenance contractor, Downer EDi Works has continued to maintain Council's assets to an acceptable standard, and issues have been kept to a minimum during the summer holiday period.

A final monthly contract meeting for 2009 was held on 7 December with a subsequent follow-up meeting in the week leading up to Christmas to ensure that all pre-Christmas checks and extra precautionary works had been completed. This included the installation of extra odour control measures at critical wastewater pump stations, checks of all critical water, stormwater and wastewater sites, and ensuring spares were on hand in case of emergencies.

Overall, relatively few significant issues have arisen during the period of peak summer demand. Some typical breaks have occurred in sewer mains and a reasonable number of breaks and leaks have occurred in rural water schemes most particularly in the Dovedale rural water scheme. Extra effort from the contractor has been required to fix broken pipes and to track and remedy leaks and resolve subsequent air-locks in the expansive Dovedale water network. The lower intake at Humphreys Creek has also been activated to supplement supply. The contractor is commended for their prompt response, ongoing follow-up and customer focus in resolving the numerous issues during the Christmas holiday period and following the New Year.

A power failure occurred on 31 December 2009 which affected the sewer and water networks of Kaiteriteri. Contract staff mobilised promptly to ensure critical assets were kept operational and monitored. Power was able to be back-fed to the majority of sites and water levels in reservoirs were returned to normal within three to four hours avoiding disruption to supplies.

- **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. Follow-up work is ongoing to ensure that problematic sites are targeted for remedial upgrade work or minor adjustments to optimise operations and further reduce communication errors.

2 WATER

2.1 General

The water schemes generally continued to operate without significant issues during the high demand period. Some systems have continued to be affected by minor telemetry communication faults. Some issues have been experienced on rural schemes, as highlighted above, the Dovedale scheme has been the most commonly affected by ongoing pipe bursts and leaks and subsequent system air-locks.

The Commissioners decision was released on 2 December 2009 in relation to the renewal of the Eighty-eight Valley Rural Water Scheme Water Take consent. The decision is generally favourable and the appeal period for the commissioner's report and Council decision ends on 14 January 2010; it is expected that the decision will not be appealed. Discussion has continued throughout the interim period between Council staff and the Ladleys and investigation work toward a workable point of connection to the scheme for the Ladley's property is ongoing.

There are no issues to report in relation to microbiological compliance for any of the schemes.

A contamination issue at Talafords Products in McPherson Street, Richmond has been resolved. Following the testing of supplies in adjacent hydrants to the property, low residual chlorine levels were attributed to system valves remaining shut following a repair. Follow up sample testing after flushing of the system has shown acceptable chlorine residual results.

- **Redwood Rural Scheme**

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

Progress towards the replacement of the Redwood 1 Reservoir continues. Negotiations with the landowner to confirm the new reservoir location and construction have reached a stalemate and it is likely that the existing reservoir will instead be relined in its current form or replaced with a reservoir of same size and in its current location.

Other general items of work included:

- The lower intake at Humphreys Creek has been activated to supplement the Dovedale scheme upper intake.
- A leak on a ferrule in Farnham Drive, Richmond required a shutdown and temporary disruption to supply for approximately 40 households.
- Issues occurred with radio communications at Collingwood reservoir; no further issues have occurred since a replacement aerial was installed.

2.2 Water Capital Projects

- **Wakefield Reservoir**

Thelins have completed the concrete floor and almost completed placing the final precast wall panels. Initial issues with the quality of the pre-cast panels have been rectified. The issues with the quality of the concrete infill between panels have been remedied. The delays that have occurred with the project remain and the contractor is expecting the final late completion date to be within 3-4 weeks of the original schedule.

- **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 recent period rainfall events have not caused significant issues. Routine maintenance and proactive maintenance were carried out in accordance with the contract schedule and have reduced the impact of the predicted events. Many of the heavy rain warnings have not resulted in the predicted rainfall occurring.

3.2 Stormwater Capital Projects

- **Salisbury Road Stormwater Upgrade**

Tenders were evaluated in December and Contract 759 was awarded to Tasman Civil Ltd immediately prior to the Christmas break. A detailed programme of work has been requested from the contractor.

- **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 in January.

- **Mapua (Seaton Valley Stream)**

Contract 762 was awarded to Tasman Civil in November of last year for the installation of an additional stormwater culvert through the Toru Street causeway, Mapua. This work is programmed to commence in March, at the conclusion of the busy summer period.

Contract 777 (for the construction of a single box culvert on the Seaton Valley Stream) was advertised in November last year and tenders closed on 2December. A preferred

tenderer has been identified for the work and approved by the Tenders Committee for award.

Some landowner negotiations for this work remain outstanding and work will commence once these have been resolved (and subject to resource consent time restrictions).

- **Motueka**

Detailed design is close to completion for the construction of a new stormwater main in Old Wharf Road, Motueka. Tenders for this work are expected to be advertised in February.

- **Brightwater**

A contract was awarded in December last year to Taylors Contracting Ltd for the widening of 410m of Jefferies Creek, Brightwater (Contract 779).

The work involves:

- Realignment and widening of 410 m of creek
- Construction of stream crossings, and
- Construction of a stormwater pipe from Jefferies Road.

All land-entry agreements have now been signed and the programmed date of commencement is January 18, with a construction period of 9 weeks.

4 WASTEWATER

4.1 General

All treatment plants were routinely checked prior to the peak Christmas period and extra odour control installed at critical sites. There were a number of issues during the holiday period which were attended to and rectified promptly.

These included:

- Burst occurred on the 100mm main at 674 Abel Tasman Drive and subsequent overflow was cleaned and the site disinfected.
- Overflow at Delaneys pump station due to power-board failure, septic tanker was in attendance and site cleaned and disinfected.
- Rabbit Island main burst was repaired, with Mapua wharf pump station isolated also requiring tankering.
- Kaiteriteri power outage, required septic tinkering until power restored.
- Rising Main burst on Abel Tasman Drive near 4 Winds pump station was isolated and repaired; subsequent pump failure required pump to be replaced.
- Waller Street, Murchison, pump station went into high alarm, due to pump jammed with a cap off a 44 gallon drum, overflow cleaned up and disinfected.
- Motels Pump station, Collingwood, power cable failure had failed due to water ingress, cable replaced.

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 fit-out work yet to be completed. A substantial portion of the gravity sewer main in Abel Tasman Drive has

also been completed. The contract did not permit the contractor to work within the roadway over the peak holiday period so during this time the contractor focused on off-road work including pump station completion. Work has commenced at the new Delaneys pump station site.

- **Motueka Sewermain Renewals**

Design work is complete for the portion of sewer renewals to be constructed this financial year. The sewer upgrade has been tendered and constructed in conjunction with the proposed NZTA reconstruction of High Street from Whakarewa to Tudor Streets. The contract is expected to be awarded this month 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 generally good performance by the contractor over the busy summer period. Detailed information is still being collected, but recycling volumes were once again high.

The contractor showed good resourcefulness in December following the loss of two collection vehicles in subsequent weeks. An additional compactor vehicle and trailer and two recycling collection vehicles were sourced from the North Island from the contractors' fleet.

Daily rubbish collection and twice-weekly recycling collection is occurring again this year at Kaiteriteri, and while some illegal dumping has been noted again this year the issue appears to have been managed well by the contractor working closely with compliance staff.

Public place recycling has proved popular over the summer period, with newly installed bins being well utilised in visitor and tourist locations.

5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period, with an improvement in site tidiness noted recently.

As noted in the last report, waste trends indicate a decline on previous years' volumes and income falling below current budgets, although preliminary data indicates an increase over seasonal trends in December.

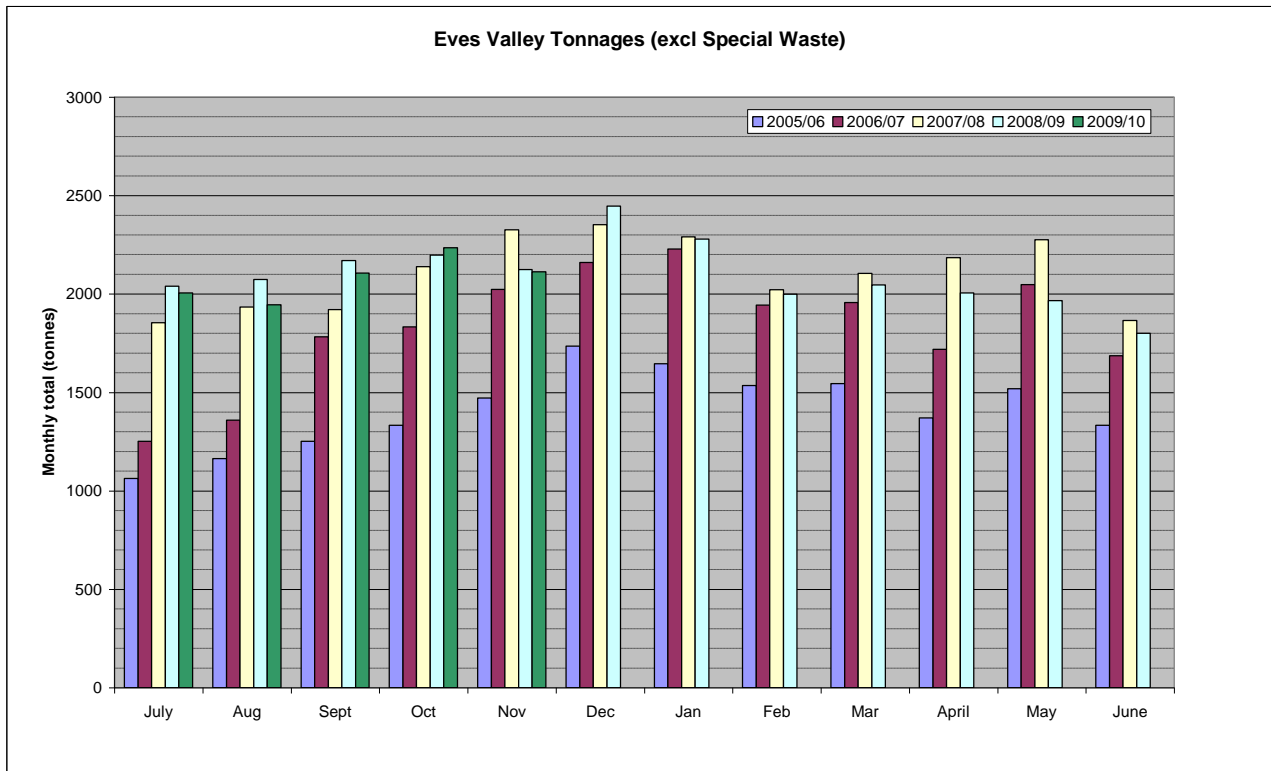
At the time of writing, not all data was available, however staff will table any significant further information at the meeting.

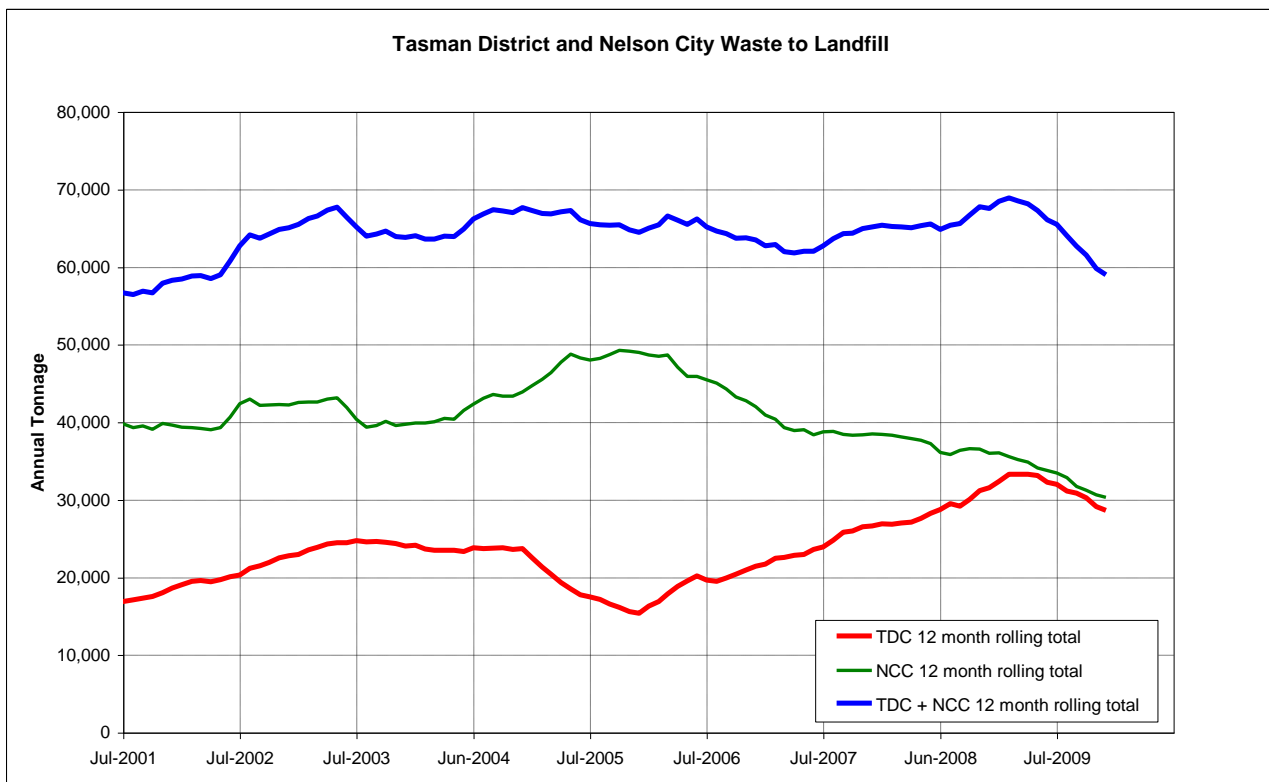
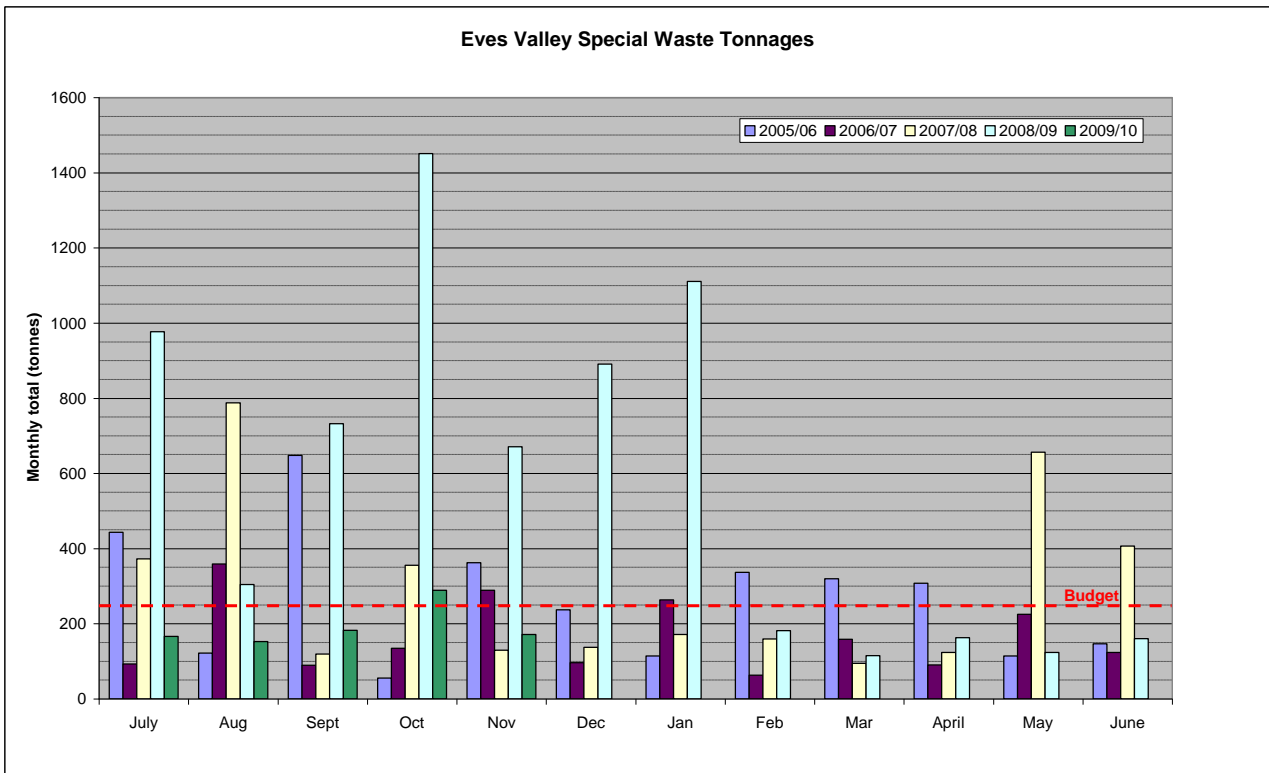
5.3 Eves Valley Landfill

Volumes in waste at this site decreased over the month of November and increased again in December (in line with seasonal trends) - although December data is preliminary at this stage. Staff expect to have December data available at the meeting and to comment on waste trends.

Special wastes decreased in November, consistent with a trend for all but October 2009.

Council's consultants continue to prepare detailed design and a tender document for landfill operations and refuse haulage from July this year. We expect to advertise tenders in late February, closing early March for a term of two years with the potential for extension for two further periods of one year.





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

Council staff have now received a first draft of a joint waste assessment for Tasman District and Nelson City Councils. A governance options assessment has also been prepared in parallel with the waste assessment.

A waste assessment is the first step in the development of a joint waste management and minimisation plan between the two councils and includes a desktop review of management options for the two landfills in the region.

A final draft is expected to be presented to the joint Council working group (Crs Dowler and Bryant, Tasman District Council and Crs Holmes and Shaw, NCC) in mid February.

It is hoped that a final waste assessment will be presented to each council for adoption in March. Once adopted, the development of a joint waste management and minimisation plan will progress.

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 |
|-----|-----------------------------------|----------------|-----------------------|-------------|----------------|--------------|----------------------|---|
| 759 | Salisbury Road Stormwater Upgrade | 3 | Tasman Civil Ltd | \$488,476 | \$677,793 | \$584,900 | \$585,000 | Budget carried forward from 2008/09 |
| 769 | Mapua Rabbit Island Rising Main | 5 | Ching Contracting Ltd | \$2,380,195 | \$2,391,292 | \$3,336,256 | \$3,451,381 | Budget includes part carried forward from 2008/09 |
| 779 | Jeffries Creek Widening Stage 2 | 3 | Taylor's Contracting | \$202,373 | \$278,240 | \$285,360 | \$227,400 | |

7 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager