

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 21 April 2008
SUBJECT: UTILITIES MANAGEMENT REPORT

1 GENERAL

The maintenance contractor has continued to perform well during the last period and operational issues have been kept to a minimum. The mid-April period of wet weather caused some issues, particularly for wastewater systems in Pohara, and minor stormwater issues in some areas typically prone to temporary surface flooding.

Monthly contract meetings were held on 19 March and 15 April.

Progress continues to improve the operational performance of the telemetry system with the installation of digital units at the highest priority water treatment sites. The digital system, which will operate as a parallel system for a trial period, is to vastly improve the transfer of extra continuous data required to meet current drinking water standards.

2 WATER

2.1 General

Water schemes continued to operate without significant issues. Some telemetry faults in early April caused some temporary issues with pumping systems in the Dovedale scheme, in particular at Thorns Reservoir, and investigations continue into why these have occurred.

The following water supply operational issues have occurred over the period:

- break on 200mm main in Aranui Road, Mapua - repair was undertaken but this required the main to be shut down temporarily and supply was restored within 4 hours;
- mains break on Stafford Drive, Mapua which caused significant road surface damage - repaired within the morning and sealed in the afternoon;
- 150mm mains burst in Toru Street, Mapua, occurred at night and supply was uninterrupted.
- Burst on supply line to Astro Bio Waste on Rabbit Island, caused issues for the Mapua system. A temporary repair was carried out with permanent works planned in the near future to resolve inadequate valving and isolation and to replace substandard pipework;
- breaks in High Street, Motueka, continue to occur due to issues with low-grade pipe materials; upcoming planned upgrades will reduce some of the vulnerability in the trunk main;
- burnt fuse and cable on the power network resulted in the Richmond Wells being shutdown temporarily - now repaired and operational

Leak detection and remedial work continues in Tapawera and Murchison. A number of leaks have been identified for urgent repair in Murchison, and the ridermain replacement in Tapawera is due to commence.

Other work includes:

- Richmond town centre water main diversion – now largely complete;
- Saxton Road diversion – a significant portion of unplanned work with some particularly challenging aspects, was completed successfully with uninterrupted supply to Enza;
- Richmond/Murchison water meter replacements – underway.

2.2 Water Capital Projects

- **Brightwater Reservoir**

Foundation work is largely complete and all sections of the concrete floor have been poured with good consistent finish quality. Construction of the first pre-cast wall panel units has commenced in Christchurch. The main support beams and pilasters have been constructed and are ready for delivery to the site. The wall panels are due to be delivered and installed on site from 21 April. The work is expected to be completed within the proposed timeline.

- **Seaton Valley Main**

Ching Contracting Ltd has completed the final portion of work alongside the state highway between Aranui Road and Higgs Road. Final commissioning and testing is underway and the Practical Completion certificate is expected to be issued by the end of month. The project has gone smoothly, has been completed within programmed timelines and final costs have come in under the contract price.

2.3 Water Supply Bylaw

Staff are presently reviewing the Water Supply Bylaw so it can include sanitary issues in a single document. It is proposed to present the revised document at the June meeting.

3 STORMWATER

3.1 General

Utilities networks were not significantly impacted by the recent rainfall events apart from some systems in Golden Bay. Highest falls were experienced in Golden Bay and Motueka, with some issues resulting, particularly affected were wastewater systems in Pohara. Surface flooding occurred in Richmond, Mapua/Ruby Bay, Motueka and Golden Bay.

Routine stormwater maintenance was undertaken in accordance with the annual schedule and flood inspection sites were pre-inspected due to heavy rain warnings. Scheduled monthly drain maintenance was completed by the mowing subcontractor.

Other stormwater works underway or due to commence include:

- Beach Road drain, Richmond, the next portion of retaining wall maintenance;
- Iwa Street, Mapua - stormwater pipework extension in conjunction with the roading upgrade project is about to commence.

3.2 Stormwater Capital Projects

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

Design and documentation for this work is with Council staff for final review and the project is expected to be advertised for tender shortly. The proposed work consists of three portions: stormwater works scheduled for 2007/08, stormwater works scheduled for 2008/09 and wastewater works scheduled for 2008/09. It is proposed to award the works as one single contract, to be completed over two financial years.

Resource consents have been granted and landowner agreements are being concluded for this work.

- **Seaton Valley Stream, Mapua**

The resource consent application for the stream works and outlet works was publicly notified on 5 April, with submissions closing on Monday 5 May. Discussions with adjacent landowners are continuing in parallel with this application.

Additional subsurface investigations are currently in progress at each of the culvert and/or bridge locations, to refine detailed design and provide additional information for tenderers. Scheduling of the channel improvements will be finalised after further landowner negotiations.

The consent approval timeline for these works may result in a delay to the commencement of construction into the next financial year.

- **Faulkners Bush, Wakefield**

Design work continues for some limited channel work in this area. Improvements to drainage works in the Treeton Place area have been scheduled in conjunction with roading staff.

- **Reservoir Creek – Templemore Drive section**

Resource consent (for channel improvements in this area) is currently being processed, with a decision expected shortly. Tenders will be advertised in late April with work expected to commence in May.

- **Collins Road, Richmond**

Design of new stormwater pipework to relieve ongoing surface flooding issues is complete. A fixed price to complete the work has been obtained and Downer EDi Works are due to commence the installation by the end of month.

- **Cornwall Place, Tata Beach**

The realignment and upgrade of existing stormwater pipework in Cornwall Place has been designed and the contract is currently out to tender.

4 WASTEWATER

4.1 General

All treatment plants were routinely checked during the month and pump stations cleaned. For stations located in areas popular during holiday periods, the frequency of sampling has been reduced back to regular levels now that the peak summer period has ended.

The following wastewater operational issues occurred during this period:

- A break occurred on the rising main from Upper Takaka Sewer pumpstation in private property - work is planned to replace portions of this main;
- Power outage in St Arnaud caused all stations to trip-out, sites were attended and stations reset without significant issues;
- Power outage in Takaka was carefully managed to avoid overflows - no equipment damage was evident;
- A shallow private rising main in Whites Road, Hope was damaged - emergency repair was undertaken and costs are to be paid by the owner;
- An isolated burst on the Abel Tasman Drive rising main was repaired and minor overflow cleaned up.

4.2 Capital works

- **Lodder Lane Sewer Main Replacement**

With the completion of final testing, commissioning and inspection, this contract has now attained practical completion, and now enters into a defects liability phase. The project was completed within programmed timelines and well within budget.

- **Takaka Sewer and Pumpstation Upgrades**

The tender for this contract has been awarded to Ching Contracting Ltd. Some alternative items were offered to potentially gain some minor cost savings but these options were declined on the basis of meeting design requirements and the original conforming tender was accepted. The contract is due to commence in early May and is expected to be completed by October.

- **Wastewater Renewals Projects**

Three tenders were received for the renewal of various sewer mains in Motueka. The tenders were evaluated and some minor technical issues are to be confirmed with the preferred tenderer prior to award of the contract. Work is expected to commence in May and completed by July.

- **Tapawera Wastewater Treatment Plant Upgrade**

This contract has been awarded to Adcock & Donaldson Ltd. Work is expected to commence in mid-May. Resource consent has also now been granted and conditions confirmed.

5 ASSET MANAGEMENT

A tender was awarded in April for the internal inspection of 11km of stormwater and wastewater sewers in Richmond and Motueka. These inspections will improve Council's knowledge of the condition and remaining life of underground assets, as well as identify areas in need of immediate repair. The work is expected to take eight weeks to complete.

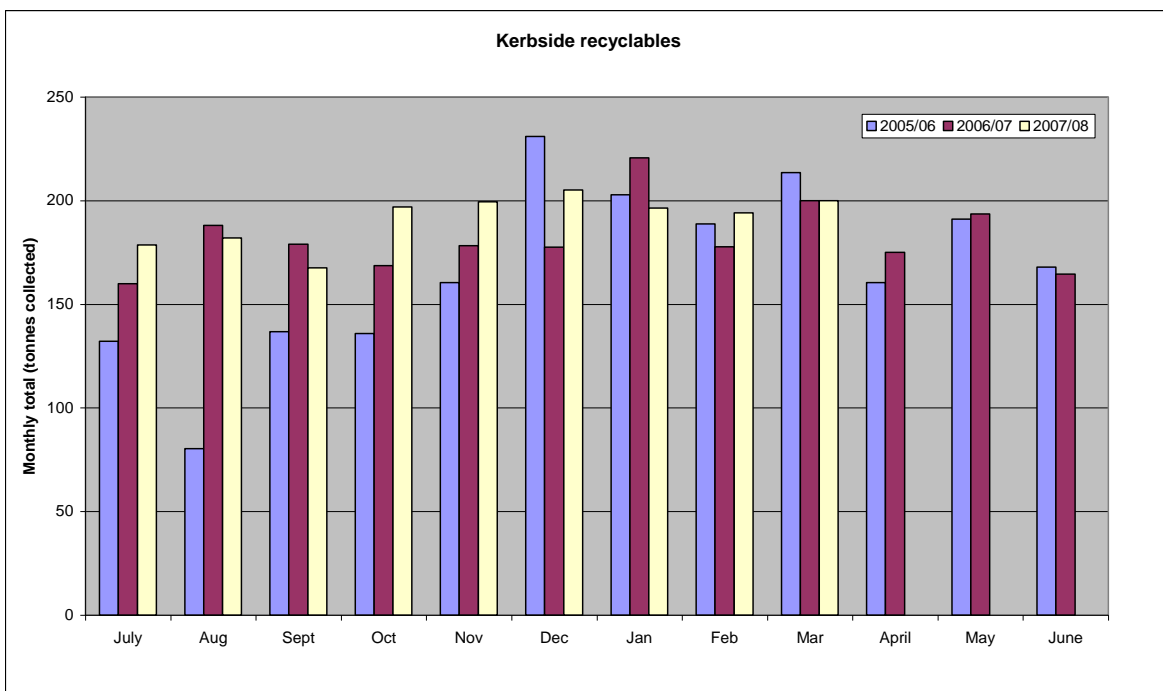
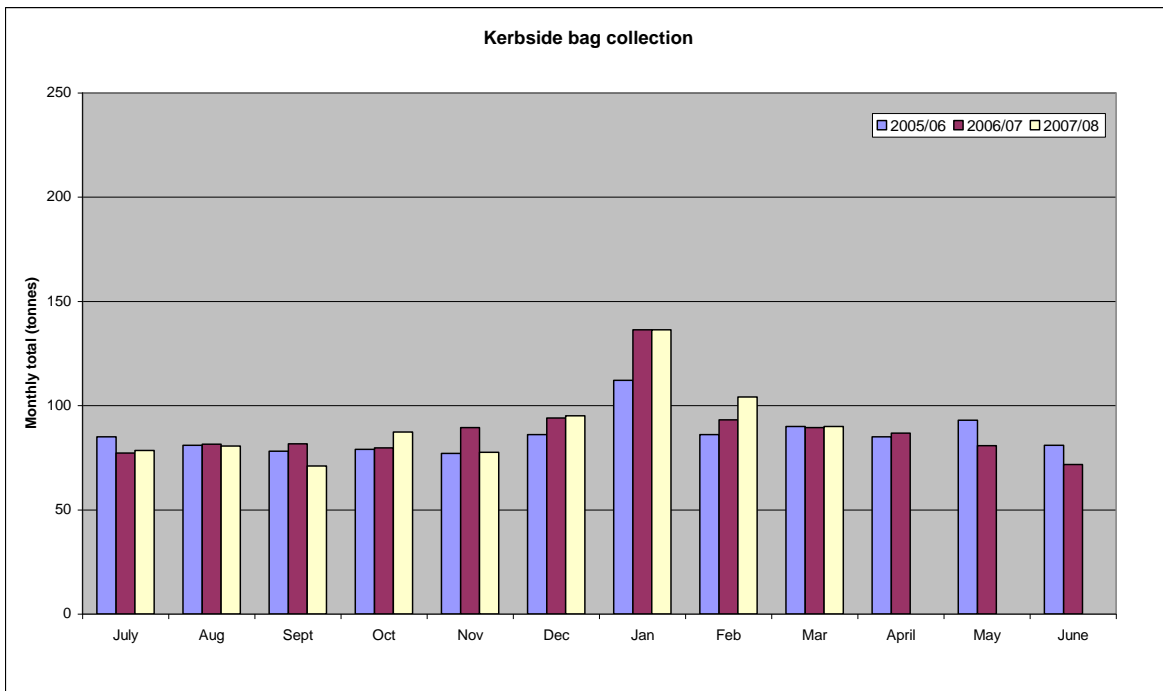
A staff member of the maintenance contractor (Downer EDi Works) is temporarily based in the Engineering Services Department as part the start-up phase of a medium-term data collection project. The staff member will assist Council staff in the collection of asset data over the next twelve months.

6 SOLID WASTE

6.1 Kerbside recycling and bag collection

Kerbside collection continued over the period with no significant issues. Official bag sales and collection rates have remained steady this year compared with previous years.

Kerbside recycling tonnages continue to steadily increase; annual totals are currently tracking 4% above those of last year.



6.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period with only limited operational issues.

- **Richmond**

This site continues to be particularly busy with seasonally adjusted tonnages tracking 20% above last year's totals.

At the time of writing, a preferred contractor had been identified for drainage improvements on the site. Council staff are continuing to work with Council's consultants and the site and transport contractors to optimise other site improvements to manage increased volumes of refuse and recycling.

- **Mariri**

Refuse quantities at this site have continued to track upwards, with tonnages currently 7% over previous year's rates.

Site investigation and foundation design are complete for the weighbridge at this site. A 12m weighbridge has been selected, similar to that installed at the Richmond site. The bridge is expected to be delivered and installed in late May or early June. Installation of the bridge at this site should significantly improve recyclable handling and recovery rates.

Recent works to improve drainage in the pit area have improved performance of the site in wet weather.

- **Takaka**

Refuse quantities at this site are tracking 2% lower than last year, with separation of recyclables working particularly well. The recyclables storage shed and new glass crushing facility are working well.

Remaining work programmed for this site is the improvement of water supplies, which is currently being investigated.

- **Murchison**

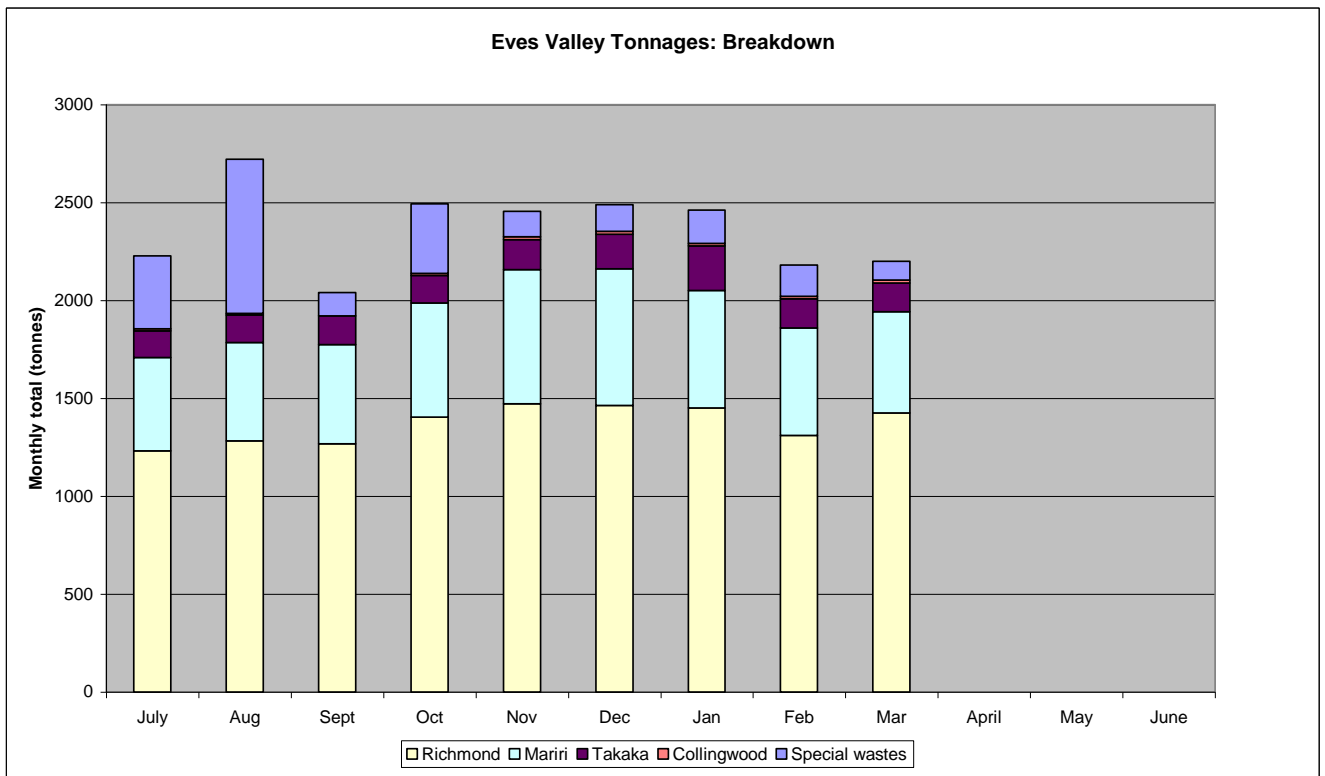
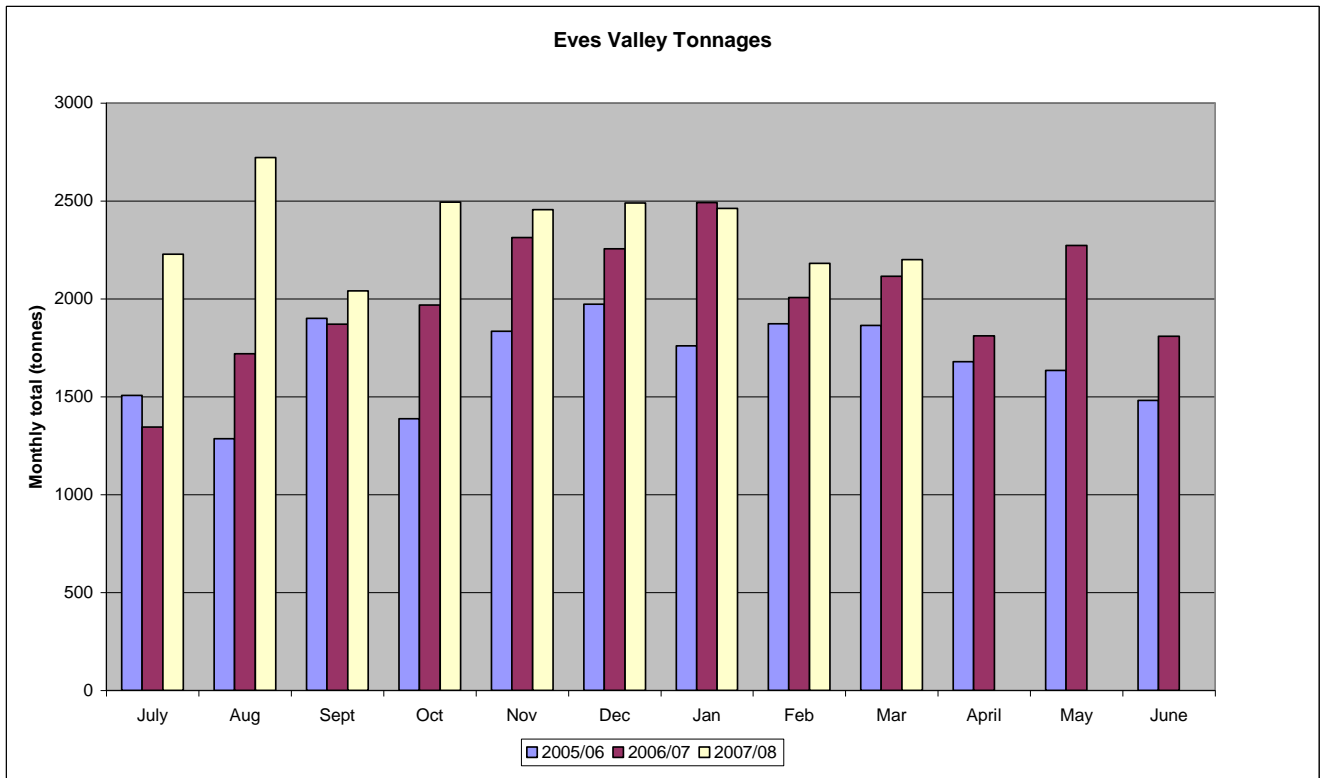
Landfill operations continue at this site, using remaining capacity of the existing landfill cell.

Resource consent was granted for the operation of the new facility in the third week of April and the contractor was expected to commence drainage work on site on 21 April. The construction of the transfer facilities and associated works are scheduled to be completed over a 12-week period.

6.3 Eves Valley Landfill

Refuse volumes to Eves Valley have increased 18% this year, with a total quantity of 28,000 tonnes projected for the 2007/2008 financial year. The main source of this increase is additional special waste (+50%) and waste from the Richmond RRC (+20%).

A single tender was received in March for the rehabilitation and reseal of the landfill access road. This tender was accepted, but with the reseal removed; this work will be rescheduled into the upcoming year.



6.4 Waste Education and Waste Minimisation

Activities in the period have included investigation of Council participation in the nationally-coordinated “e-Day”, on 27 September. A suitable venue for this event has been agreed in cooperation with Nelson City Council, and it is proposed to participate using existing waste minimisation budgets.

Waste Minimisation (Solids) Bill and Waste Management Plan

The Local Government Select Committee reported back to the house on 4 April with amendments to the Waste Minimisation (Solids) Bill. The bill has been renamed the Waste Minimisation Bill and, as reported previously, has been subject to significant submissions and amendments. The select committee delivered a unanimous report and it appears likely to be passed into law this term.

Important aspects of the revised bill identified to date include:

- the introduction of a waste levy on 1 July 2009 (at \$11.25 per tonne incl. GST)
- provision for 50% of levy funds to be provided to local government
- direction of the remaining levy funds to a contestable fund
- amended requirements on local government for Waste Management and Minimisation Plans

Key aspects of the bill will be discussed at an upcoming workshop of waste professionals, and staff will report these as they become available.

7 TENDERS

Tenders awarded since the last meeting:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	TDC estimate	Budget for this item	Comment
714	Tapawera WWTP Upgrade	2	Adcock and Donaldson Ltd	\$783,093	\$851,327	\$702,304	\$855,000	Due to commence on site in May
717	Motueka Wastewater Renewals	3	Fulton Hogan	\$308,721	\$379,725	\$296,300	\$300,000	
723	CCTV Surveys	3	Aqua Lance Consultancy Services Ltd	\$73,842	\$95,874	\$91,546	\$103,000	
725	Pohara and Takaka Sewerage System Upgrade	1	Ching Contracting Ltd	\$2,573,534	-	\$2,239,970	\$2,708,916	
728	Supply aerators Collingwood WWTP upgrade	3	Smith & Loveless	\$32,840	\$79,494	\$52,000	-	Part only of Collingwood WWTP upgrade budget
734	Eves Valley Landfill Access Road Rehabilitation	1	Downer Edi Works	\$63,002	-	\$499,929	\$46,260	

8 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager